



POLICY BRIEF ON ACCESS TO FINANCE FOR INCLUSIVE AND SOCIAL ENTREPRENEURSHIP: WHAT ROLE CAN FINTECH AND FINANCIAL LITERACY PLAY?



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■ TABLE OF CONTENTS

1 KEY MESSAGES	6
2 WHAT IS THE FINANCE GAP IN INCLUSIVE AND SOCIAL ENTREPRENEURSHIP?	7
Entrepreneurs often have difficulties accessing external financing.....	7
... and the challenge is even greater for social entrepreneurs and entrepreneurs from disadvantaged populations	8
3 WHAT ARE THE CAUSES OF THIS FINANCE GAP?	9
Demand-side barriers	9
Entrepreneurship and financial skills are often lower among disadvantaged populations and social entrepreneurs	9
People from disadvantaged populations have less developed business networks	9
Small and young social enterprises and people from disadvantaged populations often lack collateral and financial history.....	9
Supply-side barriers.....	10
Risk is more difficult to assess in inclusive and social entrepreneurship projects	10
Traditional financing instruments are not always well adapted to social enterprises.....	10
The share of transaction costs is higher in smaller loans and investments.....	10
Lenders and investors may be biased towards people and projects with similar profiles to theirs	10
4 THE POTENTIAL OF FINTECH FOR IMPROVING ACCESS TO FINANCE FOR INCLUSIVE AND SOCIAL ENTREPRENEURSHIP	12
The emergence of fintech.....	12
Opportunities of fintech for improving access to finance for inclusive and social entrepreneurship.....	13
Greater access to and an increased supply of finance	13
Improved transparency in transactions and financial history.....	13
Potential to mitigate bias from lenders and investors	13
Lower transactions costs for investors and entrepreneurs.....	13
Fintech companies can be social enterprises	13
Challenges.....	14
Access to finance may become more difficult for inclusive and social entrepreneurship.....	14
“Soft” support for borrowers may be reduced.....	14
Gaps in financial regulation	14
How can public policy leverage fintech to improve access to finance for inclusive and social entrepreneurship?.....	15
1. Crowdsourced debt and equity finance	15
2. Distributed ledger technology and blockchain	18
3. Big data	22

5 THE POTENTIAL OF FINANCIAL LITERACY PROGRAMMES FOR IMPROVING FINANCE FOR INCLUSIVE AND SOCIAL ENTREPRENEURSHIP.....	24
What is financial literacy?.....	24
The importance of financial literacy for inclusive and social entrepreneurship.....	24
How can public policy boost financial literacy to improve access to finance for inclusive and social entrepreneurship?.....	25
1. Embed financial literacy modules in inclusive and social entrepreneurship training programmes ...	25
2. Create online platforms with free financial literacy resources for inclusive and social entrepreneurship.....	26
3. Include financial literacy training as part of financial intermediation	27
6 CONCLUSIONS	29
Further reading.....	29
REFERENCES.....	30

1 KEY MESSAGES

- Access to finance constraints are more severe for potential and existing entrepreneurs from disadvantaged and under-represented groups in entrepreneurship (e.g. women, youth, immigrants, seniors, those starting up from unemployment) and people engaged in social entrepreneurship. Key barriers include difficulties in assessing risks, a lack of tailored financial products, high transaction costs, and biases among lenders and investors. Compounding these are limited networks and a lack of financial skills, collateral and financial histories among entrepreneurs. The problems are long-standing and have been exacerbated by the COVID-19 pandemic.
- Policies to support appropriate fintech products and build financial literacy provide opportunities to improve access to finance for inclusive and social entrepreneurship.
- Fintech innovations in the areas of crowdsourced debt and equity, blockchain and big data can increase the supply of entrepreneurship finance, mitigate the effects of bias among traditional lenders and investors, lower transactions costs and improve transparency in transactions.
- Policy makers can harness the potential of fintech for inclusive and social entrepreneurship in several ways. Entrepreneurship training programmes can raise awareness about fintech options for entrepreneurs. Advanced fintech training can be developed in collaboration with the private sector (e.g. using training vouchers) for those entrepreneurs with strong potential to benefit. The establishment of relevant crowdfunding platforms can also be supported, as witnessed by several good practices from local and regional governments.
- However, there is a risk that fintech in general may reinforce financial exclusion. Governments can work with the fintech sector to minimise biases in algorithms that favour high financial return projects to ensure adequate support for entrepreneurs and business models (notably social entrepreneurship) that deliver broader non-financial benefits to society. Publicly-supported programmes may also be introduced to avoid an erosion of “soft” support (e.g. advice and mentoring) as finance shifts towards fintech.
- Financial services innovation has increased the importance of financial literacy among entrepreneurs. Financial literacy training, including for fintech, needs to be embedded in inclusive and social entrepreneurship training programmes and in publicly-supported start-up financing programmes. Evaluations show that this training is most effective when delivered at the point that the entrepreneur needs financing rather than before the need arises. Policy makers should therefore develop online platforms delivering timely training in short modules. Financial literacy education could also be embedded in entrepreneurship education in formal schooling.

■ 2 WHAT IS THE FINANCE GAP IN INCLUSIVE AND SOCIAL ENTREPRENEURSHIP?

Entrepreneurs often have difficulties accessing external financing...

Between 2015 and 2019, about 9 million people per year in the European Union were involved in starting or managing new businesses, and another 22 million people operated businesses that had existed for at least 3.5 years (OECD/European Union, 2019). These entrepreneurship activities range from small-scale, part-time activities to ambitious innovative projects.

One of the most frequently identified challenges for entrepreneurs, regardless of the scale or sector, is securing sufficient financing to launch their project. This challenge has quickly become a crisis as entrepreneurs have faced serious liquidity challenges due to the COVID-19 pandemic. For example, the European Central Bank's July 2020 Bank Lending Survey showed a 62% increase in demand for business loans to provide emergency liquidity in the second quarter of 2020.

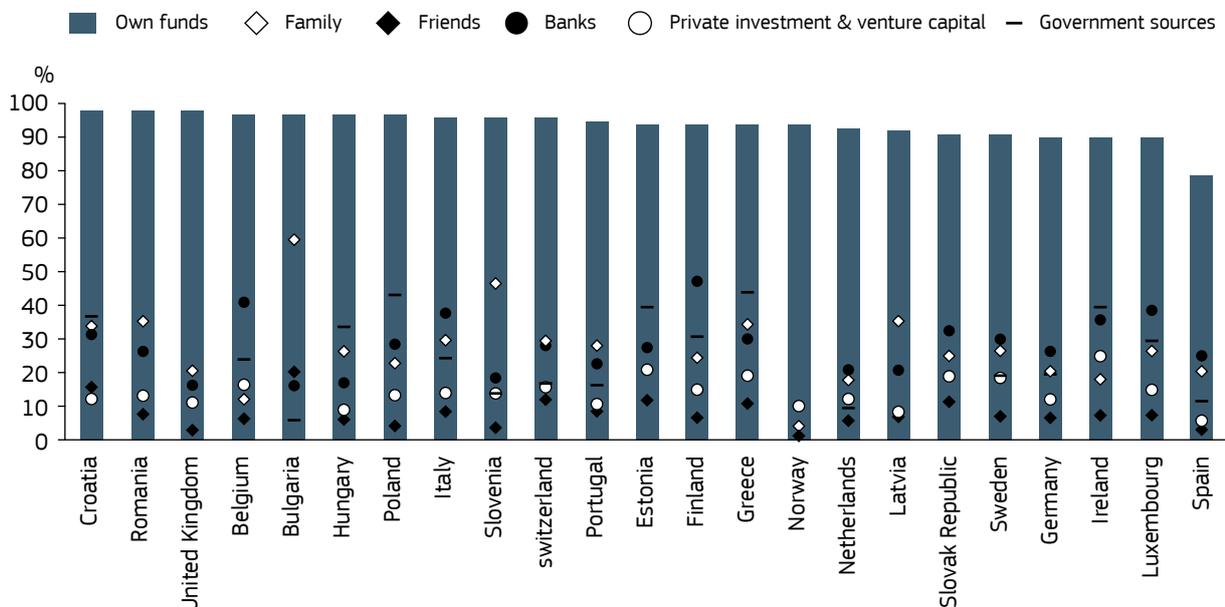
Traditionally, most entrepreneurs finance their start-up (i.e. pre start-up activities and early stages of development) with

funding from the 3F's – founder, friends and family. Own-financing (the "founder" in the 3F's) is the most common source of start-up financing in nearly all European Union (EU) Member States and OECD countries (Figure 2.1), accounting for between 65% and 85% of the total value of start-up financing in most countries. Bank financing, private investment (including venture capital) and government financing were used much less frequently.

Social entrepreneurs are also more likely to rely on the 3F's for financing, as well as philanthropic grants, debt financing and public funding (Calic and Mosakowski, 2016; Bosma et al., 2016; Parhankangas and Renko, 2017). Few social enterprises tend to access bank financing, mainly because of a lack of collateral or a lack of availability of tailored financial tools, such as patient capital or equity or quasi equity. In Germany, for example, a recent social entrepreneurship survey shows that only 11.8% of respondents used bank loans (Scharpe and Wunsch, 2019).

Figure 2.1. Sources of funding for new start-ups

Percent of early-stage entrepreneurs using each funding source, 2015



Note: Early-stage entrepreneurs are those who are in the process of setting up a new business and those who operate a business that is less than 42 months old.

Source: (Daniels, Herrington and Kew, 2016)

... and the challenge is even greater for social entrepreneurs and entrepreneurs from disadvantaged populations

Many entrepreneurs – such as women, immigrants, youth, seniors and those starting businesses from unemployment and social entrepreneurs – face challenges that are greater than the average in accessing financing for their business (OECD/European Union, 2019). Consequently, these entrepreneurs are more likely to have constrained growth potential. This further reduces their potential to attract equity investment and increases their likelihood to become discouraged borrowers, i.e. they do not apply for loans because they believe that they will not be successful (OECD/EU, 2016). Examples of these finance gaps include:

- **Women entrepreneurs** have long-faced barriers in financial markets (OECD/EU, 2016) and these barriers have been persistent over time and across contexts (Malmström et al., 2020). Women entrepreneurs in the EU are about 25% less likely than their male counterparts to use bank loans to fund their business (OECD/European Union, 2019). Even when women receive external finance, they typically receive smaller amounts, pay higher interest rates and are required to secure more collateral (Thébaud and Sharkey, 2016; Lassébie et al., 2019). Moreover, only about 13% of governmental start-up funding (e.g. grants, loans) goes to female founders (Malmström, Johansson and Wincent, 2017). Even among growth-oriented businesses that seek venture capital, only about 2% of European equity investments go to all-female founding teams (Skonieczna and Castellano, 2019). When women do receive venture capital investments, they receive about 70% of the funding amounts that male founders do (Lassébie et al., 2019).
- **Immigrant entrepreneurs** face multiple disadvantages in financial markets (OECD/European Union, 2014). As a result, immigrant entrepreneurs often rely to a much greater extent on informal sources of funding such as bootstrapping (i.e. using personal resources and equipment, as well as altering business practices in order to require less formal finance) and small bank loans (Moghaddam et al., 2017).
- **Youth entrepreneurs** also frequently have difficulty obtaining external financing for business creation. According to an EU-wide survey, 82% of young Europeans reported that a lack of finance is the main barrier to business creation (Eurofound, 2015).
- **Seniors** may be in a stronger financial position than younger entrepreneurs, since they have had a longer time period to accumulate savings and collateral. However, many surveys show that lack of start-up funds is the most frequently cited barrier for older entrepreneurs (ADIE, 2019). This is particularly true for those starting from unemployment or retirement.
- Those starting a business out of **unemployment** typically lack personal savings since they have been out of work, which makes it difficult to self-finance a business and to provide collateral for a loan (OECD/European Union, 2014).
- **Social entrepreneurs**, both new and established, report that access to finance is the greatest obstacle to developing their activity. For example, more than 60% of social enterprises in Korea report that access to finance is their biggest obstacle in the initial stages of the business, particularly in obtaining loans from banks and commercial institutions (Korean Ministry of SMEs and Startups, 2019). Evidence from the United Kingdom shows that obtaining grant funding, debt or equity finance is considered as the main barrier to sustainability and growth by 43% of the social enterprises surveyed and that they are over three times more likely to seek external financing than equivalent for-profit SMEs (Mansfield and Gregory, 2019). However, social enterprises are more likely to receive less funding than sought. For example, in Italy, 38% of social cooperatives and enterprises did not receive the full amount of financing they requested from credit institutions over the last three years (UBI Banca, 2019).

■ 3 WHAT ARE THE CAUSES OF THIS FINANCE GAP?

The causes of the finance gaps for inclusive and social entrepreneurship can be found on both the demand-side (i.e. factors related to the entrepreneur and/or their venture) and the

supply-side (i.e. factors related to lenders and investors), as well as in inefficiencies in financial intermediaries that help link financial actors and entrepreneurs.

Demand-side barriers

Entrepreneurship and financial skills are often lower among disadvantaged populations and social entrepreneurs

There is a wealth of evidence that shows that, on average, youth (OECD/European Commission, 2020), women (OECD/European Union, 2019; OECD/EU, 2016) and seniors (OECD/European Union, 2019) have relatively lower levels of entrepreneurship skills (e.g. business management skills, risk management, opportunity recognition, business networking) than the population average. This typically means that they also have less knowledge about the types of financing available and how they can be accessed. Immigrant and refugee entrepreneurs also tend to have lower levels of entrepreneurship skills, partly reflecting lower familiarity with the institutional environment, and smaller and less effective networks, which further hinder their ability to identify potential sources of financing (Bates, Bradford and Seamans, 2018; Neville et al., 2018). Unemployed people may not know how to apply for a loan or complete the required business plans (OECD/European Union, 2014).

Similarly, social enterprises face a challenge in reinforcing their skills to build sustainable business models. Fundraising is often perceived as an obstacle to growth. In the Netherlands, 32% of social entrepreneurs did not seek external financing in 2018 preferring to rely on their personal income (Social Enterprise NL, 2019). As a consequence, they have difficulties establishing long-term financial strategies. In Italy, only 41% of the social enterprises surveyed in 2016 had defined an investment plan for external fund raising (Zandonai, 2018). Hence, their requests for financing are not necessarily systematic or well structured. In Germany, 68% of social entrepreneurs have secured their financial planning for a time period of less than one year (Scharpe and Wunsch, 2019).

Lower levels of financial literacy is a particular challenge faced by many entrepreneurs from under-represented and disadvantaged groups, as well as social entrepreneurs. This restricts their ability to plan and manage finance, and to identify and access sources of external financing. For further discussion on financial literacy, please see section 5.

People from disadvantaged populations have less developed business networks

One method of identifying potential financing is through personal entrepreneurship networks. However, entrepreneurs from under-represented and disadvantaged groups tend to have under-developed entrepreneurship networks. Youth entrepreneurs tend to have networks that favour social connections over professional ones, while women entrepreneurs often lack professional support providers and other entrepreneurs in their networks (OECD/EU, 2015). Similarly, immigrant entrepreneurs tend to have networks that are strong inside their community but less so in the wider business community (OECD/European Union, 2014). This may prevent them from exploring different sources of funding, such as venture capital funding and business angel funding, to which they have had less exposure.

Small and young social enterprises and people from disadvantaged populations often lack collateral and financial history

Many entrepreneurs from under-represented and disadvantaged groups have low levels of savings. For example, youth entrepreneurs rarely have much of a work history so they have little capital or collateral that can be used to secure debt, and may also have student debt. Moreover, they usually have little experience seeking and acquiring debt and equity financing (Eurofound, 2016; Schøtt, Kew and Cheraghi, 2015). On average, immigrants have low levels of savings and often have difficulty demonstrating a sufficient credit history to secure debt financing (Moghaddam et al., 2017; Betts, Omata and Bloom, 2017). In addition, some groups of immigrants such as refugees lack access to a bank account and are therefore excluded from the formal financial system (Lyon, Sepulveda and Syrett, 2007). Similarly, smaller and younger social enterprises often cannot offer adequate guarantees or collateral on their own (European Commission, 2020). Those entrepreneurs with low levels of savings typically require more collateral and/or larger guarantees and are charged higher interest rates for loans.

Supply-side barriers

Risk is more difficult to assess in inclusive and social entrepreneurship projects

Lenders often require a large amount of documentation on personal net worth, financial records, and personal qualifications that may only exist for established businesses. In general, entrepreneurs and small and medium-sized enterprises (SMEs) have difficulties providing adequate financial information to lenders and investors so that they can assess the risk associated with new start-up projects (Koreen and Nemoto, 2019).

These challenges are even greater for youth and women entrepreneurs who often have little experience in entrepreneurship. Moreover, immigrant entrepreneurs may face hurdles in demonstrating a financial history from another country. Similarly, social entrepreneurs can face challenges in securing finance since traditional bank scoring criteria are based on business models that seek to maximise revenue and profit; they are not well equipped for social or hybrid business models (Bugg-Levine, Kogut and Kulatilaka, 2012).

The risk-return analysis underpinning decisions about investing in social enterprises is often skewed by a lack of information and misperceptions. While their profit margins may be lower than traditional SMEs, especially on the short term, survival rates can be higher due to public and philanthropic support. For instance, a study in the Netherlands revealed that in 2016, approximately 20% of the social enterprises that existed five years before had ceased operations, which was about half of the closure rate of SMEs (38%) (Keizer et al., 2016). Complementary evidence at country level may actually confute this common belief, upholding that social enterprises can be just as profitable as other economic actors. In Portugal, cooperatives from the social and solidarity economy show healthier financial indicators than similar commercial businesses (CASES, 2020). In the United Kingdom, more social enterprise employers generated a profit in 2016 compared to SMEs, at 93% vs. 76% respectively (DCMS, 2017).

Traditional financing instruments are not always well adapted to social enterprises

Social enterprises have particularities, including a variety of legal forms, which call for tailored or blended financing instruments, mixing standard market instruments with more patient sources of capital. Social enterprises tend to have lower margins than commercial companies and their participatory governance model implies an additional barrier in terms of external liability. Existing financial tools are often poorly suited to their hybrid model, that strives to combine for-profit activities with a general interest mission (Wilkinson et al., 2014). This is partly due to a lack of visibility and understanding of social enterprises

among mainstream finance providers. The mismatch between the business models adopted by social entrepreneurs and the traditional risk-return analysis performed by banks makes them less attractive as potential clients. While the consideration of environmental, social and governance factors is increasingly perceived as significant for financial decision making, it is still far from becoming a widespread practice in the banking industry (Deloitte, 2019). As a result, measures that are meant as administrative assessments can already screen out qualified candidates due to built-in preferences before their cases are thoroughly examined.

The share of transaction costs is higher in smaller loans and investments

Many entrepreneurs from under-represented and disadvantaged groups operate smaller businesses with lower scale-up potential (OECD/European Union, 2019). Therefore, they typically seek smaller loans than entrepreneurs with greater growth ambitions or those who operate in more capital-intensive sectors. This makes the recovery of fixed administrative and transaction costs, which make up a disproportionately large share of costs related to small loans, difficult for lenders. As such, entrepreneurs requiring small loans are less attractive for banks. Even though lenders charge higher interest rates to entrepreneurs and SMEs to cover the greater credit risk, these loans are often less profitable than larger ones (Koreen and Nemoto, 2019).

The same applies to the majority of social enterprises that, due to their size, might require relatively small financing amounts. The most important financing gap for early-stage social enterprises is found between EUR 100 000 and EUR 500 000, where the transaction costs are comparatively high (FASE, 2018). This tranche tends to be too big for donors or philanthropists, and too small for institutional investors. But many social enterprises seek financing even below that threshold, where proportionately transaction costs will weigh even more on each deal. For instance, 68% of German social entrepreneurs required start-up capital below EUR 100 000 in 2018 (Scharpe and Wunsch, 2019). If not bridged by specialised intermediary services, this situation threatens to widen the gap for early-stage social enterprise finance.

Lenders and investors may be biased towards people and projects with similar profiles to theirs

There is some evidence to suggest that entrepreneurs from under-represented and disadvantaged groups as well as social entrepreneurs may be more likely to face discrimination in financial markets. This is typically in the form of unconscious discrimination such as investor homophily, which is where

investors and lenders are more likely to finance people and projects that have similar profiles to themselves. This is an issue because inclusive entrepreneurship population groups and people with social economy experience tend to be under-represented among lenders and investors. For example, research shows that negative stereotypes during investment and

lending decisions can negatively impact women entrepreneurs (Shepherd et al., 2020; Malmström, Johansson and Wincent, 2017). Similarly, experimental research has found that male entrepreneurs were about 60% more likely than female entrepreneurs to receive investments even when the content of the pitches was identical (Wood Brooks et al., 2014).

■ 4 THE POTENTIAL OF FINTECH FOR IMPROVING ACCESS TO FINANCE FOR INCLUSIVE AND SOCIAL ENTREPRENEURSHIP

The emergence of fintech

Fintech is a contraction of “finance” and “technology.” It is defined by the Financial Stability Board (FSB) as “[t]echnology-enabled innovation in financial services that could result in new business models, applications, processes or products with an associated material effect on the provision of financial services” (FSB, 2017). This covers a wide range of financial services, including debt and equity instruments such as online challenger banks (i.e. new banks that typically rely on fintech products and services to compete with traditional banks), fintech credit marketplaces (e.g. online crowdfunding platforms), and the digital transformation of private equity instruments (i.e. digitalisation of investment assessment and monitoring, including the influence on investor objectives). These innovations also include new data analytical possibilities (e.g. big data) and distributed ledger technologies (e.g. blockchain).

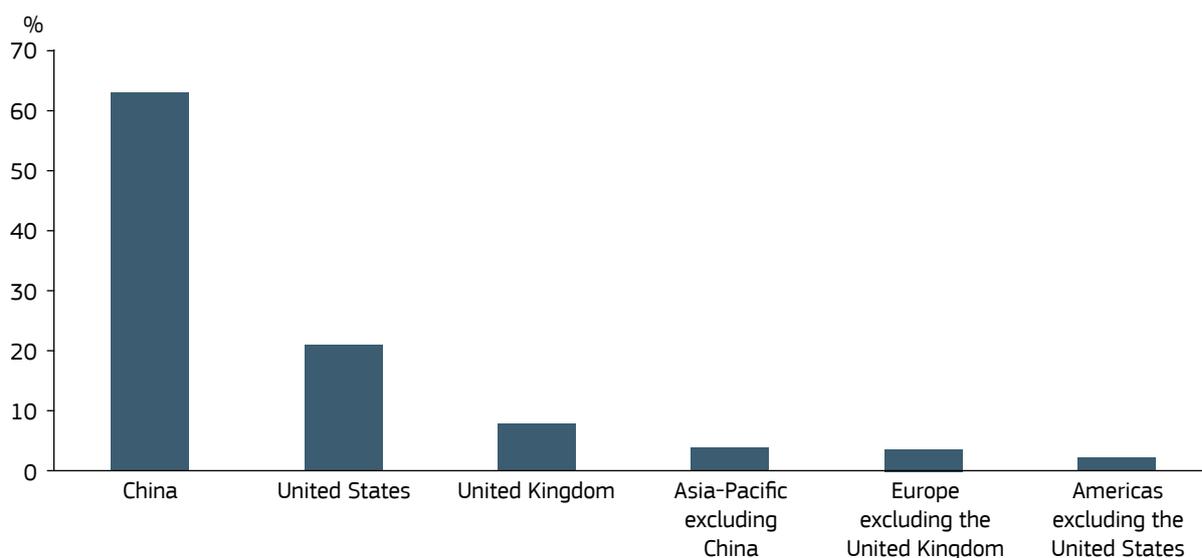
The online alternative finance market for businesses (comprising debt, equity and crowdfunding platforms) has expanded rapidly in recent years. Growth rates were especially high in emerging and small economies, where activities remain

relatively modest, and lower in more mature and developed markets. Despite a sharp decline in 2018, China has by far the largest market for alternative finance, representing 62.5% of global volumes. The next largest markets are the United States and the United Kingdom which account for 20.5% and 7.5% of global volumes (Figure 4.1). The share of volumes in the European Union remain relatively modest in comparison, with France as the most active market (with a global share of 0.6%), followed by Italy (0.6%) and the Netherlands (0.5%).

The growth of fintech and alternative finance markets has affected the way that traditional actors are doing their business, and has also led to many new entrants into these markets. Incumbents in the financial sector are adopting techniques and instruments introduced by fintech, and “big tech firms” (e.g. Amazon, Alibaba, Alphabet, Apple, Facebook) are entering the financial services realm (OECD, 2020a). The growth of fintech and alternative financial markets creates both opportunities and challenges for inclusive and social entrepreneurship.

Figure 4.1. The online alternative finance market for businesses by region

As a percentage of total volumes, 2018



Source: (CCAF, 2020).

Opportunities of fintech for improving access to finance for inclusive and social entrepreneurship

Fintech is becoming increasingly important in easing access to finance for entrepreneurs and SMEs (OECD, 2020a; OECD, 2019a). New technologies and innovations such as digital ID verification, distributed ledger technologies (DLT), big data and marketplace lending are creating opportunities for new suppliers and an array of innovative financial services that have the potential to revolutionise finance markets for inclusive and social entrepreneurship (Palmié et al., 2019).

Greater access to and an increased supply of finance

Fintech innovations may increase the supply of finance to inclusive and social entrepreneurship through the entry of new types of suppliers (e.g. technology companies) and by creating platforms that allow entrepreneurs to tap into large numbers of small investors or lenders (i.e. crowdsourcing) (Bruton et al., 2015). These new instruments and suppliers create opportunities for projects that might otherwise not receive external financing because they are judged by other market actors as too small, too risky, or because they have a social purpose rather than purely commercial goals (OECD, 2019b). For example, some research shows that women entrepreneurs, on average, receive 1.3 times more contributors on crowdfunding platforms than male-led campaigns and raise 10.8% more money (Slade, 2013).

Improved transparency in transactions and financial history

Innovations in the financial sector can improve risk assessments by lenders and investors. This is important for inclusive and social entrepreneurship, as many of these entrepreneurs may lack a credit history and/or operate businesses that do not seek to maximise profits or growth. For example, fintech can leverage big data on the entrepreneur's personal profiles and activities to assess risk based on online behaviours. This is particularly relevant for so-called impact investors, who base their investment decisions on explicit and measurable impact goals, alongside financial returns (OECD, 2019b).

Potential to mitigate bias from lenders and investors

Fintech also has potential to mitigate bias and help to address discriminatory problems in the financial sector through the ability to conceal some of the 'discriminatory' factors that may influence a lending or investment decision such as gender, age and ethnicity (Belleflamme, Lambert and Schwienbacher, 2013). For example, algorithms that are used to inform financial decisions may be able to exclude factors that lead to

unconscious bias. However, this is not always the case (see next section on challenges).

Lower transactions costs for investors and entrepreneurs

Fintech innovations can also lower transaction and operating costs, which can reduce the cost of delivering financial services (Ellman and Hurkens, 2019). For instance, this could open up access to debt instruments for those seeking small loans because the profit margins increase for lenders. These savings may be partially passed on to entrepreneurs in the form of reduced costs of debt. Similarly, other new financial products such as insurtech (i.e. technologies that improve the efficiency of insurance companies and markets, including strengthened risk assessments, streamlined processes, chatbots and more) and smart contracts (i.e. computer protocols that facilitate, verify and/or execute the negotiation or execution of a contract) have the potential to reduce operating costs for entrepreneurs more broadly.

Fintech companies can be social enterprises

In addition to reducing the finance gap for inclusive and social entrepreneurship, fintech innovations can also address social problems directly. A growing number of social start-ups are built on innovative technologies. This includes, for example, using blockchain to create creditworthy identifications for migrants and using machine learning to help combat financial exploitation of individuals with impairments. In addition, fintech start-ups are increasingly seeking to achieve societal (e.g. financial inclusion, insuring the uninsured) or environmental goals (e.g. climate change). The Social FinTech sector is still very fragmented, but dedicated hubs, intermediaries and networks are emerging.¹

¹ Examples include www.socialfintech.org and www.fintechforgood.com.

Challenges

Despite its potential to close finance gaps in inclusive and social entrepreneurship, there is a risk that fintech may exacerbate some existing problems.

Access to finance may become more difficult for inclusive and social entrepreneurship

Although fintech holds potential for improving financial inclusion, it could increase financial exclusion for three reasons. First, fintech may favour high-return businesses. Moving towards transaction-based finance models that are more heavily reliant on algorithms diminishes the personal side of the lending/investing relationship and potentially puts a greater emphasis on minimising risk and maximising profits. This could leave lenders and investors blind to other desirable outcomes with non-financial benefits. Moreover, new algorithms that minimise risk may exclude entrepreneurs who lack a digital financial history or who have atypical projects.

Second, algorithms used in fintech may be designed with a bias. Algorithms are typically based on previous decisions on investment opportunities and may also unintentionally produce discriminatory outcomes because the programmer is unlikely to be completely unbiased. For example, most estimates suggest that about 80-85% of fintech founders are male so it is likely that these companies have an unintentional gender bias in their products and services (Innovate/Finance, 2019; Finovate, 2020). Such biases would lead to missed opportunities for those less-represented entrepreneurs.

Third, low levels of digital skills and financial literacy gaps may hamper access to fintech. Innovations in financial products, services and markets require even greater digital and financial literacy skills, leaving disadvantaged groups further behind. Fintech innovations may also introduce risks that hit vulnerable groups the most due to low levels of financial and digital literacy. One example is blockchain technology, which is risky due to lack of regulation. The hype around bitcoin, for example, may seem tempting to financially illiterate individuals, who might invest in them without understanding the risks of investing in assets and currencies that are based largely on speculation. This is also relevant for entrepreneurs who accept bitcoin as a form of payment.

“Soft” support for borrowers may be reduced

The digitalisation of finance also deprives entrepreneurs of formal and informal support from their lender and/or investor. Greater use of lending algorithms likely reduces entrepreneurs’ personal contact with financing institutions and individual investors, potentially reducing the opportunities for “soft” support such as business advice and mentoring. Entrepreneurs from disadvantaged and under-represented groups rely disproportionately on these types of support. Research suggests that female entrepreneurs may suffer the most as banks increasingly rely on digital and online processes (Malmström and Wincent, 2018). The trend towards less in-person interaction also presents a challenge for lenders and investors since it is more difficult to acquire “soft” information about the progress of projects or businesses that may lead to advice or follow-up action.

Gaps in financial regulation

The rapid expansion of fintech since the early 2010s presents several challenges for regulators. These challenges are greatest in markets that have reached a critical mass such as China, the United Kingdom and the United States, but this is also relevant for other countries since transactions can be conducted from anywhere. These challenges include (OECD, 2020a):

- Managing risks to overall stability of the financial system since (1) some products and markets are unregulated; and (2) some technologies (e.g. crowdfunding platforms) are prone to pro-cyclicality (i.e. funds are available when economy is doing well, less available when it is not);
- Applying banking and anti-money laundering regulations to new actors in the growing financial services sector;
- Licensing requirements for new markets, products and actors;
- Ensuring consumer protection;
- Managing privacy and information sharing among fintech actors, and between fintech actors and the traditional financial sector; and
- Monitoring cross-border transactions.

How can public policy leverage fintech to improve access to finance for inclusive and social entrepreneurship?

There are several examples of countries developing strategies or action plans for harnessing the potential benefits of fintech for improving access to finance for individuals, businesses and other types of organisations. For example, the European Union FinTech Action Plan outlines 19 actions to encourage and support the adoption of fintech across EU Member State economies (Box 4.1).

While fintech covers a wide range of innovations, three appear to hold great potential for improving access to finance for inclusive and social entrepreneurship: i) Crowdsourced debt and equity finance; ii) Distribution ledger technology and blockchain; and iii) Big data.

Box 4.1. European Union FinTech Action Plan

The EU FinTech Action Plan was adopted in 2018 and sets out 19 steps to: facilitate the scale-up of innovative business models; adopt new technologies across all sectors; strengthen cybersecurity; and protect the integrity of the financial system. Some important strides have already been achieved. The Action Plan was developed in response to the mid-term review of the EU Capital Markets Union Action Plan in June 2017, which highlighted the potential of fintech to transform capital markets by introducing new actors and new solutions that could lower costs for businesses and investors.

One of the key elements of the Action Plan is a regulation for crowdfunding platforms (for more information, please see Box 4.2). Other key actions include:

- Development of an EU FinTech Laboratory where EU and national authorities can interact with, and learn

Source: https://ec.europa.eu/info/publications/180308-action-plan-fintech_en

from, technology developers and providers in a neutral, non-commercial space;

- Creation of an EU Blockchain Observatory and Forum to monitor blockchain developments and crypto assets, as well as to develop a strategy on distributed ledger technology and blockchain;
- Consultations on the digitisation of information published by listed companies in the EU to improve access to information for investors;
- Organisation of workshops to improve information-sharing about cybersecurity; and
- Plans to develop regulatory sandboxes based on guidance from European Supervisory Authorities.

1. Crowdsourced debt and equity finance

What is it?

Crowdfunding essentially refers to tapping into the “crowd” to secure financing rather than using one or two large lenders or investors. It has been a popular source of funding for young companies because it typically provides fast access to funds, and is less costly than other types of finance targeted at inclusive and social entrepreneurship. Online alternative finance in Europe, including crowdfunding and peer-to-peer lending, has increased almost seven-fold from EUR 1.1 billion in 2013 to EUR 7.7 billion in 2016 (Ziegler et al., 2018). This growth was much higher than the growth in bank lending in the EU, which was negative between 2008 and 2016, then grew at about 4% annually between 2016 and 2018.

There are different forms of crowdfunding, ranging from an equity-based model, profit-sharing schemes, lending and product pre-sales to outright donations (Ahlers et al., 2015). The investing “crowd” is promised a monetary or non-monetary reward (e.g. recognition, voting rights) for donating, lending or

investing capital in a venture or project. The most common form is crowd lending (also called peer-to-peer lending or marketplace lending), where a group of investors co-finance projects by lending money to the entrepreneurs (“project owners”) in return for the interest on their investment.

To list projects on crowdsourcing platforms, entrepreneurs are typically required to fill out an application and provide financial information that will be assessed by the platform. Thus, a decent credit score is typically needed to obtain a loan via a crowdsourcing platform and it will be damaged if the entrepreneur does not meet their obligations. Different types of platforms have different business models. However, they commonly charge a fee or a percentage of transactions, because they assist with screening funding deals and with other administrative and strategic services.

What are the potential implications for inclusive and social entrepreneurship?

Crowdfunding can improve access to finance for new start-ups by entrepreneurs from under-represented and disadvantaged

groups, as well as for those with social entrepreneurship projects. There is evidence that some groups of entrepreneurs, such as women and social entrepreneurs, are disproportionately successful on crowdfunding platforms (Johnson, Stevenson and Letwin, 2018; Calic and Mosakowski, 2016). This is often explained by the more diverse pool of funders that is active on crowdfunding platforms than in traditional finance markets.

Successful crowdfunding campaigns can also help entrepreneurs from under-represented and disadvantaged groups and social entrepreneurs to build legitimacy for their projects. This may in turn help them gain access to further finance through larger investors and/or lenders. Investors and lenders will likely be more interested if they see great public enthusiasm for the project being financed. This is particularly true for social entrepreneurs who can mobilise the local community that will benefit from the products or services the social enterprise will deliver.

Finally, the exposure that entrepreneurs and their products receive on platforms, as well as potential media coverage, may help to broaden their networks. It is however important for entrepreneurs to engage in funding campaigns (e.g. provide updates) to promote their project(s) and increase their chances of success, which requires strong communication skills and efforts.

What should policy makers do?

To harness the benefits of crowdfunding platforms for inclusive and social entrepreneurship, policy makers first need to ensure that underserved entrepreneurs have sufficient levels of financial literacy and digital skills to understand the opportunities and risks of crowdsourced financing (please see section 5 for additional discussion). Beyond this, there are several areas where policy action is needed.

One of the most pressing policy issues is to develop an appropriate regulatory environment for crowdfunding to ensure that platforms are transparent so that all parties, including lenders and investors have some level of protection. Most policy makers have used a very “light touch” approach since these funding models rely on small contributions by a large number of different individuals, which means that the financial risks are quite small and spread out. In the EU, new rules for crowdfunding were published in December 2019 (Box 4.2) to guide EU Member States in developing their own national regulations. The framework also proposes how international transactions should be regulated.

Box 4.2. New EU Regulation on crowdfunding

In October 2020, the European Parliament approved new rules that will enable crowdfunding platforms to easily provide services across the EU single market (Regulation (EU) 2020/1503 of 7 October 2020 on European crowdfunding service providers for business). The new regulation will apply to European Crowdfunding Service Providers that raise up to EUR 5 million per project per year. It seeks to protect investors through clear rules on information disclosure. Moreover, the new regulation would require crowdfunding service providers to request authorisation from the national authorities in the Member State in which they are established. Supervision would be carried out

Source: (European Parliament, 2019_[71]).

by national authorities with the European Securities and Markets Authority facilitating and coordinating cooperation between countries.

The regulations cover small companies and entrepreneurs, which should enable them to use crowdfunding to a greater extent. This would support inclusive and social entrepreneurship, and also help more people from under-represented groups to become investors since the proposed Regulation requires more in-depth advice and guidance from crowdfunding service providers for non-sophisticated investors. These requirements include an assessment of their ability to bear losses.

Governments can use crowdfunding platforms in several ways to directly support entrepreneurs from various target groups, including social entrepreneurs. Four ways in which governments could directly be active on crowdfunding platforms to support inclusive and social entrepreneurship are (Passeri, 2019):

1. **Sponsor:** A public authority could run its own campaign for inclusive and/or social entrepreneurship projects on an existing crowdfunding platform (e.g. to provide small grants, offer entrepreneurship training or coaching). For example,

a city government could launch a crowdfunding campaign to undertake social impact projects.

2. **Manager:** The public authority could create its own crowdfunding platform with specific criteria for inclusive and/or social entrepreneurship projects that will be included. For example, the City of Vienna supports a crowdfunding platform that provides students with an opportunity to obtain crowdsourced funds to undertake school projects (Box 4.3).

3. **Facilitator:** The public authority could partner with an existing crowdfunding platform to provide a small amount of additional funds to projects that have already been successful on a selected crowdfunding platform. For example, a local government could support senior entrepreneurs by providing EUR 1 000 to projects managed by seniors that have already secured their level of requested funding and meet defined criteria.
4. **Matching funder:** The public authority could co-fund inclusive and/or social entrepreneurship projects that meet specific criteria. For example, public funds could be used to fund a certain percentage of projects that meet defined inclusive and/or social entrepreneurship criteria and for which a certain threshold of funding has been met from the “crowd”. An example of this type of role is Civic Crowdfunding Milan, which was used by the City of Milan to co-fund projects that have a high potential social impact ([Box 4.4](#)).

Box 4.3. “Start your project” (Starte dein Projekt), Austria

Target group

Student entrepreneurs

Intervention type

Crowdfunding platform

Description

Since the 2014-15 school year, students in technical and vocational schools are required to implement an entrepreneurial project before graduation. The platform was launched to support students to carry out their projects by giving them an opportunity to crowdsource funds. The platform is an initiative of the Erste Group Bank AG, IFTE (Initiative for Teaching Entrepreneurship) and the Vienna School Board (*Stadtschulrat Wien*).

To list a project on the platform, students or teams create an account by entering some basic information (e.g. student names, email address) as well as their school and teacher. Projects require a description and students have the option to upload photos and embed videos from YouTube or Vimeo. They must also indicate the amount of funding that they are seeking and the deadline to reach the budget. After registering on the platform, someone from the Erste Bank will follow up to arrange for the funds raised to be deposited into a specific account at the bank.

Source: (Starte dein Projekt, 2020_[73])

The platform requires the involvement of teachers in the projects. Students are required to submit a financial plan that is shared with the teacher but is not made public. Further, teachers are required to activate the projects on the platform. Once projects are finished, students must close them. The platform does not charge fees for school projects.

In addition to offering a crowdfunding platform, students can also access training materials and online training modules.

Results achieved

Since the school year 2014-15, 54 projects have been listed on the platform (as of May 2020). Of these projects, five are ongoing or will be opened shortly. Among the other 49 projects, 30 were successful in raising all of the funds sought.

Lessons for other initiatives

This is an example of a small-scale crowdfunding platform that has a clear target audience and purpose. It has successfully leveraged two existing infrastructures – schools and banks – which reduces the need to develop a new infrastructure and new processes. Schools act as the gatekeepers for the platform since the teacher has to approve all projects, and the bank manages the collection of funds and transfers them to the student entrepreneurs.

Box 4.4. Civic Crowdfunding Milan, Italy

Target group

Entrepreneurial projects with social impact

Intervention type

Crowdfunding platform

Description

In 2016, the City of Milan started to support a bottom-up crowdfunding initiative in favour of projects of public interest with a high social impact. The purpose was to foster the implementation of innovative ideas that would increase the quality of urban life, making Milan a more inclusive and sustainable city. This initiative represents the first case in Italy of a local government using the crowdfunding tool for matching-funds with the administration.

The projects, which collected 50% of their budget from donations, received an equal amount in co-funding from the City of Milan, up to EUR 50 000. The platform was chosen through a previous public procurement tender and featured a dedicated space for the municipality projects, visible at the national level.

Results achieved

A total of 54 proposals were submitted and 18 actively participated in the crowdfunding campaign. After four different

rounds, 16 participating projects (i.e. 88%) reached their fundraising goal.

As a result, over EUR 330 000 were collected from the 1 300 user donations on the platform, matched by an equivalent contribution from the Municipality. The total investment in the territory amounted to EUR 656 549 for projects related to the cultural and social regeneration of urban areas or technological innovations related to mobility and social services. In light of its success, a second edition of the initiative is currently underway.

Lessons for other initiatives

Being open to both for-profit and non-profit proposals, the call for projects instilled collaboration for social innovation across start-ups, companies and third sector organisations. By choosing not to open its own online platform, the City of Milan could save resources and tap into the big pool of users that was already active on the service provider's website.

Civic Crowdfunding was confirmed as a new way for the municipality of Milan to fund projects of public and social interest, while at the same time promoting citizens' engagement and sponsorship. The first edition received many recognitions both at the national and at international level, the last one in 2019 when Milan was selected for the Wellbeing City Award 2019.

Source: <https://innovationinpolitics.eu/en/showroom-project/civic-crowdfunding/>; <https://innovationinpolitics.eu/wp-content/uploads/2020/01/3-4.pdf>; <http://nws.eurocities.eu/MediaShell/GetMediaBytes?mediaReference=id167844>

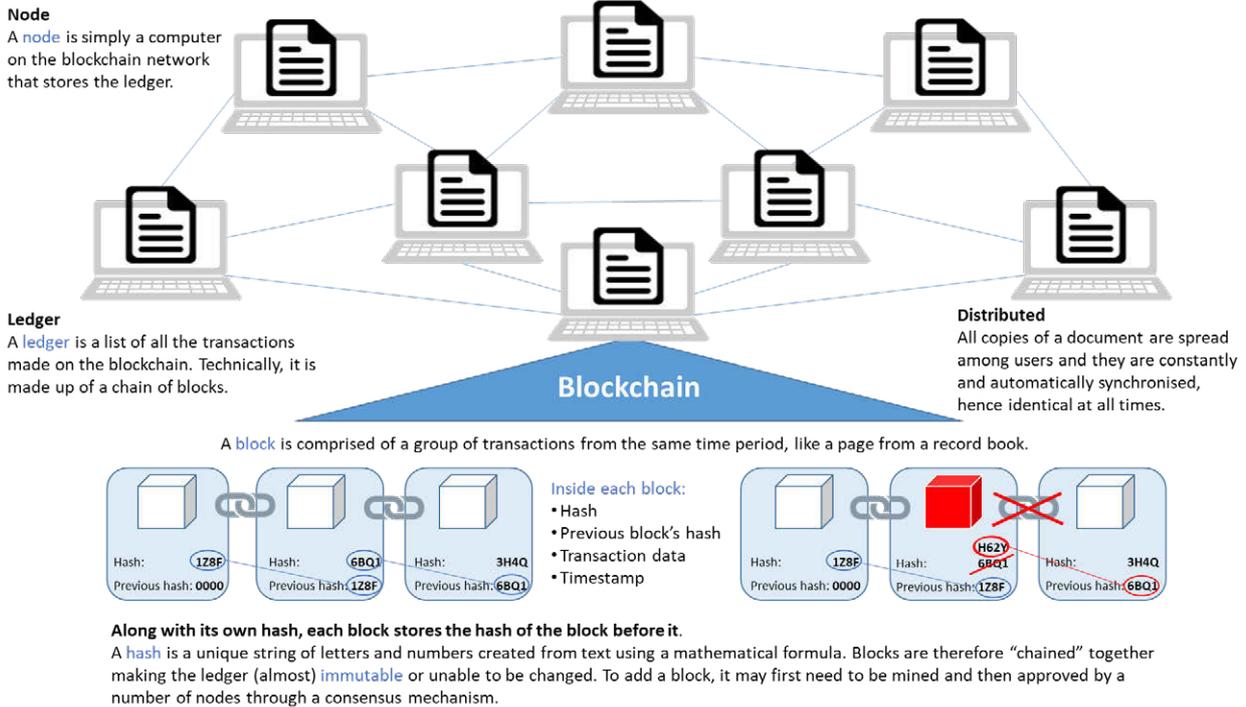
2. Distributed ledger technology and blockchain

What is it?

Although distributed ledger technology and blockchain are related, they are not synonymous terms. **Distributed ledger technology** is a decentralised database that is shared across a network of computers but not controlled by a single central

authority. Each computer (i.e. "node") maintains a copy of the database and any updates are recorded independently by all nodes. **Blockchain** is a type of distributed ledger technology and the defining characteristic is that information is recorded in blocks that are sequenced. It can be thought of as a ledger in a record book: it records and stores all transactions between users in chronological order. When new transactions occur, new blocks are added to the chain (Figure 4.2).

Figure 4.2. An overview of blockchain



Source: (OECD, 2018)

While not every blockchain is made the same, they share a number of core characteristics:

1. **Decentralisation:** Blockchain technology allows any two peers to interact without authentication by a central agency, reducing server costs and bottlenecks.
2. **Persistence:** Due to the spread-out nature of the records, they are almost impossible to forge. This makes falsification of records very difficult and the technology very safe.
3. **Anonymity:** The software does not require any central party keeping user information. As such, privacy can be preserved.
4. **Auditability:** Blockchains are timestamped, ensuring that users can verify and trace prior records.

Moreover there are a number of key features that can be used to identify different types of blockchain (Table 4.1). Two of the most important features are the “openness” of the platform (i.e. public vs. private) and the level of permissions required to add information to the blockchain (i.e. permissioned or permissionless). Public blockchains (e.g. Bitcoin) are open for anyone to read and view, while private blockchains can only be viewed by authorised people. Similarly, permissioned blockchains allow just a select group of users to write (i.e. generate transactions for the ledger to record) and commit (i.e. verify new blocks for addition to the chain). In contrast, permissionless blockchains allow anyone to contribute and add data to the ledger.

Table 4.1. The main types of blockchain segmented by permission model

			Read	Write	Commit	Example
Blockchain types	Open	Public permissionless	Open to anyone	Anyone	Anyone	Bitcoin, Ethereum
		Public permissioned	Open to anyone	Authorised participants	All or subset of authorised participants	Supply chain ledger for retail brand viewable by public
	Closed	Consortium	Restricted to an authorised set of participants	Authorised participants	All or subset of authorised participants	Multiple banks operating a shared ledger
		Private permissioned “enterprise”	Fully private or restricted to a limited set of authorised nodes	Network operator only	Network operator only	External bank ledger shared between parent company and subsidiaries

Source: (OECD, 2018)

Currently, the most notable use of blockchain technology is cryptocurrencies, which are digital assets designed as a medium of exchange. Unlike traditional currencies, they do not rely on central banking systems but use decentralised control structures. The most famous of cryptocurrencies is Bitcoin.

However, blockchain can also be used to provide a diverse array of financial services, including remittances and online payments, smart contracts, and organised reputation systems (i.e. peer/customer scoring and rating systems) (Zheng et al., 2018). In addition, there are many non-financial applications for blockchain technology, for instance for due diligence in supply chains, for data management systems on patient healthcare information and to enable decentralised peer-to-peer electricity markets.

What are the potential implications for inclusive and social entrepreneurship?

First, blockchain technology has the potential to reduce transaction costs, decrease settlement times and reduce errors, largely through the removal of intermediation. These efficiencies are expected to reduce transaction costs. The cost of external finance would therefore decrease for entrepreneurs. While all entrepreneurs will benefit, those with lower margin businesses (often including entrepreneurs from under-represented and disadvantaged groups) and those that do not maximise profits should have greater access to finance as smaller loans become more profitable for lenders.

Second, blockchain can improve the verification of information, including personal identity. This improved access to verified

information could improve the outcomes of the assessments of inclusive and social entrepreneurship projects for finance, which are more likely to be missing elements required by traditional bank lenders. For example, entrepreneurs from groups such as immigrants, refugees and other low-income groups (e.g. Roma) may not always have the official identity documents (e.g. identity cards or passports) required to obtain external finance and may not have the means to pay for them. Private sector-led initiatives (e.g. IBM Verify Credentials) are building decentralised identity management systems which would enable entrepreneurs to become easily identifiable on a public blockchain. Similarly, blockchain has the potential to link credit history and other financial information to the identity, which should improve access to finance services for the “unbanked” (RSK, 2020).

Third, blockchain technology could be used to improve the disbursement of public funding to inclusive and social entrepreneurship projects (RSK, 2020). Blockchain provides improved traceability. Programme managers would have improved methods for monitoring funds disbursed (e.g. grants, microfinance). This has the potential to help government programmes more effectively reach their targets. It could also allow for more frequent and accurate programme reporting and stronger evaluations on the impact of inclusive and social entrepreneurship programmes.

Fourth, blockchain creates an opportunity to raise start-up financing through Initial Coin Offerings (ICOs). This fundraising method issues digital assets that can be exchanged for cryptocurrencies in the future, usually during the start-up phase of a project. While ICOs are still uncommon – most

estimates suggest that there are about 50 per month (globally) – the growth in ICOs has been remarkable. Between 2017 and 2018, ICOs increased forty-fold and they now account for approximately 2% of the value of initial public offers (i.e. new stock listings). However, there is no clear regulatory oversight or accounting standards for ICO tokens or for the financial reporting of companies that have raised funds through ICOs. There are also risks for issuers and buyers (i.e. “subscribers”) including scams (e.g. pump and dump schemes) and volatility in value (e.g. due to speculation). Moreover, information asymmetries can be exacerbated due to a lack of transparency and difficulties applying traditional valuation methods. Given the scale of ICO activities and risks for issuers and buyers, the potential for ICOs being used to support inclusive and social entrepreneurship currently seems limited.

Despite the potential benefits, the potential of blockchain for improving financial inclusion has remained largely unrealised. Overall, the adoption of distributed ledger technologies has been slow due to scalability challenges (e.g. transaction backlogs due to heavy use), technical barriers (e.g. data storage issues, defining formal verification protocols) and privacy issues (e.g. to what extent should transactions and their parties be private?). Moreover, several central banks and financial institutions have noted the tension between the current interbank payment system and decentralisation of distributed ledger technology. Nonetheless, blockchain has made some progress in addressing three challenges that financially excluded people face: i) a lack of formal identification; ii) the absence of a verifiable credit history; iii) a lack of access to cheap and accessible flows of capital (Adebaki, 2018).

What should policy makers do?

Many of the benefits of blockchain for financing business creation require the widespread adoption of blockchain technology throughout the financial system. This requires new regulatory

regimes and accounting requirements that appropriately balance the risks for all parties and the overall stability of the financial system.

In terms of inclusive and social entrepreneurship, both policy makers and entrepreneurs need a greater level of awareness and understanding of blockchain. This includes its (potential) applications and the associated risks. For entrepreneurs, more intensive training on applying blockchain technology could be offered as part of inclusive and social entrepreneurship programmes. Governments could work with the private sector to develop training programmes to leverage their existing expertise. One option would be to provide training vouchers to participants in inclusive and social entrepreneurship programmes that can be used to access private sector training on blockchain. Similarly, governments could fund spaces in technology incubators and accelerator programmes for entrepreneurs from under-represented and disadvantaged groups with the greatest potential. One example of this approach is WILLA Women in Fintech in France, which is an accelerator programme for female entrepreneurs in fintech fields ([Box 4.5](#)).

It is also important for policy makers to learn about how blockchain could improve the operation and delivery of inclusive and social entrepreneurship programmes. For example, blockchain could improve the management of information on participants (e.g. applications, project proposals, support received, progress made) as well as monitoring the disbursement of public funds and tracking programme outcomes. This would help improve transparency of programme operations and would create information depositories that could facilitate programme evaluations.

More generally, inclusive and social entrepreneurship programmes need to boost digital literacy training, since many of the targeted entrepreneurs have low levels of digital skills (OECD/European Union, 2019).

Box 4.5. WILLA Women in Fintech, France

Target group

Women entrepreneurs in Fintech

Intervention type

Acceleration programme

Description

WILLA Women in Fintech is a programme for female fintech entrepreneurs. It was launched because research in France found that only 1 in 10 fintech start-ups in 2018 were founded by women, while those founded by mixed teams were more successful than average.

The programme consists of six months of accompaniment during the early development stages of a fintech start-up. Six workshops are organised over the six-month programme covering the development of business models and plans, as well as access to legal, financial and technical (e.g. digital) support. Bi-weekly informal workshops and discussions are also organised. Participants are also offered networking opportunities and professional coaching.

Eligible start-ups must have at least one female founder or co-founder, and operate in one of the following fields: fintech, insurtech, regtech, payment, financing, investment

Source: <https://www.hellowilla.co/programmes/willa-women-in-fintech/>

and savings services. The project must be scalable with a viable business model. Five start-ups are selected by a jury of industry professionals for each edition of the programme.

The programme is led by WILLA – a start-up accelerator with a strong focus on inclusion – and Rothschild & Co. It also receives support from a range of organisations, including Banque de France and Ile-de-France, the regional government.

Results achieved

The first edition received 40 applications and the jury selected six start-ups for the programme. The first edition ran from July 2019 until January 2020. The second edition accepted applications until the end of April 2020.

Lessons for other initiatives

This example demonstrates how governments can provide support to existing infrastructures that utilise industry expertise to support women entrepreneurs (or entrepreneurs from other under-represented groups) in fintech fields. This approach is cost-effective because public authorities do not need to acquire the technical expertise to design and deliver programmes in a rapidly evolving field.

3. Big data

What is it?

The term “big data” usually refers to (i) the large dimension of datasets; and (ii) the need to use large-scale computing power and non-standard software and methods to extract value from the data in a reasonable amount of time (OECD, 2015; OECD, 2016). Most definitions tend to highlight the three V’s – high volume, velocity and variety – which require specific technology and analytical methods for these data to have value (which some consider to be the fourth “V”) (George et al., 2016). Volume represents the size of the datasets, velocity the speed at which data is collected and analysed, and variety the diversity of data sources (text, videos, audio recordings, images, etc.). Each “V” has increased enormously in magnitude over the past decade, and is expected to continue to expand rapidly, especially with the expansion of the Internet of Things.

Traditionally, financial service companies employ “small data” (e.g. credit scores) as they evaluate potential customers. However, as new technologies and innovative financial services emerge, new information that is useful in assessing credit worthiness has become available, albeit highly disorganised. This is where big data becomes increasingly useful. Big data

compiles and organises fragmented and scattered data into something useful for financial service providers.

What are the potential implications for inclusive and social entrepreneurship?

Big data has the potential to improve access to finance for inclusive and social entrepreneurship in several ways. First, big data can enable financial services providers to reach client segments that were previously excluded, notably for credit and insurance. Having greater volumes of data can help lenders develop credit scores for clients who have “thin files”. For example, there are examples of lenders that use mobile phone data to understand client behaviour (e.g. Cignify in the United Kingdom), as well as others that use social media data and online reputations (e.g. Lenddo in the Philippines). This could help entrepreneurs that have little financial history (e.g. youth, immigrants) to secure credit, as well as those businesses that have motivations other than profit maximisation. This is particularly relevant for online business loans, which disproportionately serve low-income, young, women-owned, and minority-owned firms (Ahmed et al., 2015).

Second, big data can help financial service providers manage risk and improve the efficiency of their operations. Risk

management can be improved through big data by improving the predictions of a borrower's willingness to repay and improving the detection of fraud. These improvements could increase access to finance for inclusive and social entrepreneurship by lowering the cost of loans and reducing the tendency of providers to ration credit to reduce excessive risk.

Third, big data has the potential to change the way that financial services are designed and marketed. This could improve the alignment of financial products with the needs of social entrepreneurs, as well as entrepreneurs from under-represented and disadvantaged groups who have financial needs that are distinct from the "average" entrepreneur. Lenders would also be able to improve their outreach to different segments of entrepreneurs.

Fourth, social entrepreneurs may use big data in their extra-financial reporting, to quantify the social outcomes of their activities. For example, a social venture may introduce a new Key Performance Indicator that is based on big data. In the case of an education venture, this may be the degree to which the beneficiaries apply what they have learned. Quantifying outcomes in this way can help social ventures optimise their own activities, as well as convince external stakeholders of their achievements.

What should policy makers do?

Overall, policy makers need to consider the need to balance the regulatory concerns (e.g. privacy and data protection) against the potential benefits. In 2018, the EU launched the General Data Protection Regulation (GDPR), which helps protect the data of individuals in the EU. This is especially important for the most vulnerable groups, such as migrants, whose data is most likely to invite discriminatory practices. The Law also addresses the transfer of personal data outside of the EU and European Economic Area (EEA). It is the largest and most incisive legislative move to return the control to individuals over their own data.

To leverage big data for inclusive and social entrepreneurship, policy makers will need to work with the financial sector to ensure that the use of big data and algorithms do not exacerbate financial exclusion. While public policy could develop benchmarks/quotas, standards or regulations to achieve this, it may be more effective to work directly with the private sector to ensure that financial inclusion is a common objective. One approach used in the EU is public-private research projects that conduct experiments to reduce discrimination (e.g. the public-private collaborations led by the Swedish Innovation Agency VINNOVA that conduct research and experiments on financial innovation, including the impacts of artificial intelligence and deep learning).

In addition, public business incubator and accelerator programmes that support inclusive and social entrepreneurship could be used to help entrepreneurs adapt big data and artificial intelligence into their business models. Policy makers can use three different approaches in developing business incubator and accelerator programmes for inclusive and social entrepreneurship: (i) provide funding to incubation and accelerator programmes that are operated by the private and third sector; (ii) launch dedicated incubation or accelerator programmes that are operated by the public sector; or (iii) improve access to mainstream incubator and accelerator programmes for inclusive and social entrepreneurship by the use of quotas or mechanisms that match them to unused capacity in existing programmes.

Public programmes could also make greater use of big data. Inclusive and social entrepreneurship programmes could become champions for the use of big data, particularly with the potential for developing and using alternative credit scores (e.g. metrics that are developed with data that are correlated with credit scores and ability to repay). An important first step in further incorporating the use of big data into public programmes is to monitor developments in the private sector and methods of utilising big data. Most governments have innovation managers who already work closely with the private sector, and these roles could be expanded slightly to disseminate information on big data across all ministries.

■ 5 THE POTENTIAL OF FINANCIAL LITERACY PROGRAMMES FOR IMPROVING FINANCE FOR INCLUSIVE AND SOCIAL ENTREPRENEURSHIP

What is financial literacy?

Broadly speaking, financial literacy can be defined as “a combination of awareness, knowledge, skill, attitude and behaviour necessary to make sound financial decisions and ultimately achieve individual financial wellbeing” (OECD-INFE, 2011). While much is known about general financial literacy and how it varies across population groups (Lusardi, 2019; Klapper and Lusardi, 2020; OECD, 2020b), it is important to distinguish financial literacy related to household and personal finances from financial literacy for business creation and management. The latter requires the skills and knowledge to:

- understand financial products for business, including their relevance, costs and risks;
- identify sources of start-up financing, including alternative forms and sources of finance;
- anticipate future financial needs of the business under alternative scenarios;

- assess the financial risks to which the business is exposed and prepare appropriate responses;
- understand the decision-making process of finance providers, and thus appreciate how the business can become creditworthy or investment-ready; and
- use financial information to analyse business performance and create policies and controls that optimise this.

In addition, social entrepreneurs face different financial scenarios that require additional knowledge and skills. Most social entrepreneurs operate entities with business models that combine activities that generate revenue with those that do not. This creates additional challenges in ensuring that the entity is sustainable, since there is typically a greater need to draw on a wide range of funding sources and balance short-term financial needs against long-term sustainability.

The importance of financial literacy for inclusive and social entrepreneurship

Most research finds a positive correlation between financial literacy and entrepreneurship outcomes. Entrepreneurs with greater financial knowledge make more informed and strategic decisions, leading to better resource allocation decisions. This improves credit-worthiness, increasing the availability and decreasing the cost of credit (Hussain, Salia and Karim, 2018). They also tend to be more aware of sources of information, advice and capital for entering and surviving self-employment (Cumurovic and Hyll, 2019).

Furthermore, research has found that these effects of financial literacy on entrepreneurship outcomes vary across populations. Surveys consistently find a significant gender gap in financial literacy among entrepreneurs. However, the Bank of Italy’s Survey of Household Income and Wealth suggests that male entrepreneurs benefit from strong financial literacy skills (relative to other male entrepreneurs) but that the effects are not significant for females (Oggero, Rossi and Ughetto, 2019).

The effects of business financial literacy also appear to differ by age. A recent survey about the financial skills needed by employees and entrepreneurs by Junior Achievement Europe

found that 71% of young people self-report that they are missing at least one of the top three financial skills needed and that 23% indicated that all three of the top skills needed are missing (Junior Achievement Europe, 2016). This is consistent with a recent survey in Canada that found that young entrepreneurs were less likely to rate their financial knowledge as “knowledgeable” or “very knowledgeable” (Business Development Bank of Canada, 2017).

This is especially a challenge for social entrepreneurs who typically need to combine market resources (e.g. the sale of goods and services), non-market resources (e.g. government subsidies and private donations), and non-monetary resources (e.g. volunteer work). In the Netherlands, no less than 71% of social enterprises raised several types of capital in 2017 (Social Enterprise NL, 2018). They also often incorporate funds provided by impact investors and mainstream financial institutions. Yet, in Italy, only 36% of social cooperatives and enterprises are familiar with instruments pertaining to social impact finance. Moreover, only one in three organisations is actually interested or is already using them (UBI Banca, 2019).

How can public policy boost financial literacy to improve access to finance for inclusive and social entrepreneurship?

Initiatives and projects that seek to strengthen financial literacy for existing and/or potential entrepreneurs may have two effects: i) increase the propensity for starting a business; and ii) increase the quality of financial decisions made by entrepreneurs, which increases their chances of short-term and long-term success. Policy makers have several approaches that they can take in offering financial education for inclusive and social entrepreneurship.

1. Embed financial literacy modules in inclusive and social entrepreneurship training programmes

Policy makers have boosted financial literacy training and education over the past 15 years. However, meta-analyses of the outcomes of financial education find mixed results. For example, a review of 201 financial education programmes for consumers found that controlling for other factors, financial education can partially explain subsequent behaviour changes but that this effect diminishes very quickly (Fernandes, Lynch and Netemeyer, 2014).

Lessons can also be drawn from training projects that have been implemented in developing countries (often funded by foreign aid projects). An assessment of 37 evaluations in developing countries found positive impacts overall but relative to other support measures, financial literacy was found to be among the least effective methods of improving business prospects, even when combined with financial support (Cho and Honorati, 2014). This analysis also found that financial training for entrepreneurs appears to be most effective either as very short modules delivered at the moment when the information is needed, or as long and very comprehensive programmes.

This literature offers several lessons for policy makers to consider when designing financial education for entrepreneurs. First, entrepreneurs appear to have more positive outcomes when practical knowledge and skills are taught instead of abstract concepts that cannot be directly applied to their daily business activities. Second, the material taught needs to be delivered when it is needed, otherwise it will likely be forgotten.

Financial literacy education for entrepreneurs can be delivered in three main ways. First, financial literacy modules can be embedded in existing inclusive and social entrepreneurship training. Although evaluation evidence suggests that just-in-time training modules are the most useful for entrepreneurs (Fernandes, Lynch and Netemeyer, 2014), it is very difficult for training programmes to anticipate the needs of each participant at any given moment. Therefore, inclusive and social entrepreneurship training programmes should instead cover the basic skills needed for business creation and business management, including:

- Sources of start-up financing, including public funding opportunities and public procurement;
- Opening and managing a business bank account;
- Basic accounting methods, including budget and revenue forecasts, invoicing, and inventory management;
- Cost and profit management;
- Identification and management of financial risk;
- Taxation; and
- Developments in fintech, including i) technologies aimed at businesses so that the entrepreneur understands the basic concepts to avoid being taken advantage of by lenders and investors, and ii) technologies that are demanded by consumers (e.g. electronic money, crypto assets, remittance services).

An example of this approach is the training kits that were developed for youth by the INVEST Project ([Box 5.1](#)), which resulted in training modules that can be used by youth entrepreneurship programmes across the EU.

It is also important to do more to embed financial literacy training in entrepreneurship education within the formal school system at different levels (e.g. primary, lower secondary and secondary education). Evaluations tend to find that the impact of financial education is greatest in elementary schools (Kaiser and Menkhoff, 2018). This suggests that a phased approach is likely to be most effective, where basic financial concepts are taught to young children and increasingly complex and more business-related concepts are taught to older students. Evaluations suggest embedding entrepreneurship education in all fields of study (Oggero, Rossi and Ughetto, 2019) and teaching it to small groups in short modules (e.g. two hours per week) over longer periods (e.g. 10-12 weeks) (Kaiser and Menkhoff, 2018). In higher education, the growing offer of advanced degrees in alternative finance can help support the take-up of these sources of finance, particularly in the area of social finance where many of those involved in higher education are also practitioners.

Finally, it is important to evaluate financial education. The OECD has developed principles for evaluating financial education (OECD, 2013), which provide practical guidance about the use of focus groups, interviews, exams, observed behaviours, surveys, and learning diaries.

Box 5.1. INVEST Project in Malta, Italy, Greece, United Kingdom, and the Netherlands

Target group

Youth entrepreneurs aged 18–34 years old

Intervention type

Training

Description

The project “INVEST Financial & Forecasting Models for Entrepreneurs” developed a downloadable training module on financial literacy, primarily aimed at young entrepreneurs. The objective was to develop a training kit to help young micro-entrepreneurs make responsible economic, financial and investment choices, for their businesses and themselves.

The project had three types of activities leading up to the release of the training kit, including country events to raise awareness about financial literacy, focus groups to learn about the needs of entrepreneurs and success factors of existing programmes, and partners’ meetings to advance the work.

A pilot version of the training toolkit was initially launched in November 2017, then subsequently improved through several rounds of pilot testing with more than 400 participants. The toolkit was launched in November 2018 and can

Source: <http://www.investproject.eu/>

be downloaded for free. It includes learning materials as well as exercises and a glossary. The online tool also tracks the progress and performance of participants.

The project was managed by a consortium that included organisations from the financial services sector (the Mediterranean Bank Network in Malta and Association EFFEBI in Italy), the education sector (Eurocrea Merchant in Italy and IDEC in Greece), and business and entrepreneurship organisations (Bridging To The Future in the United Kingdom, Inqubator Leeuwarden in the Netherlands and the Malta Business Bureau). The project received funding from the EU Erasmus+ Key Action 2 Strategic Partnerships Vocational and Educational Training Sector.

Results achieved

The project produced a financial literacy tool kit for entrepreneurs that is free to use.

Lessons for other initiatives

This toolkit was prepared through an international public-private partnership. This method could be a model for other initiatives that are looking to develop training modules on financial literacy for inclusive or social entrepreneurship. The toolkit that was developed could even serve as a starting point.

2. Create online platforms with free financial literacy resources for inclusive and social entrepreneurship

Another approach to offering learning materials about financial literacy is to build online platforms that contain resource materials such as glossaries, short instructional videos, diagnostic tools, short articles and templates for financial materials (e.g. reporting forms, presentations). The main advantage of this approach is that it can respond to on-demand needs for information at the moment it is needed. Another important benefit is that it is easier to keep small packages of information and materials updated over larger integrated learning programmes.

Short on-demand training modules and videos are an important resource and are increasingly appearing on public websites for businesses. The materials should provide practice-oriented training that considers the different needs of entrepreneurs at different stages in the development of their businesses:

- Pre-start-up: financial planning, securing start-up financing, basic accounting;

- Early-stage entrepreneurship: formalising financial plans and reporting, implementing greater financial control systems;
- Established business: formalising and professionalising financing management; and,
- Growing businesses: securing growth capital, managing supply chains and human resources.

To be effective for inclusive and social entrepreneurship, online financial literacy portals need to be designed for people with relatively low levels of financial and digital skills. Therefore, the use of jargon should be minimised and some of the content could be tailored for specific groups. For example, videos or short articles could offer tips for female entrepreneurs seeking risk capital or social entrepreneurs who are seeking social investments. An example of such an approach is the Good Finance platform in the United Kingdom, which is designed to help charities and social enterprises understand social investment (Box 5.2). The platform offers a large variety of content and also organises in-person events and workshops.

An important success factor for online financial literacy portals is that there is a high level of awareness and use of the tools. Policy makers should partner with financial intermediaries, business development service providers and business associations

to help disseminate online resources. It is particularly important to engage those which deliver support measures that are tailored for inclusive and social entrepreneurship target groups.

Box 5.2. Good Finance platform, United Kingdom

Target group

UK-based charities and social enterprises

Intervention type

A digital platform accompanied by offline engagement activity

Description

Research in the UK had identified a critical need for a comprehensive digital resource to help charities and social enterprises effectively navigate social investment. The Good Finance initiative aims at establishing a single trusted source of information on social investment by:

- Improving knowledge on repayable finance, what it is, what it can be used for and the journey and process it requires;
- Enabling charities and social enterprises to make informed decisions, based on their needs and situation, not on embedded attitudes;
- Helping connect organisations to the right investors based on shared values.

The website was built following an extensive period of iterative and user-centred research with charities and social enterprises across the UK. The concept was developed through a design thinking approach commissioned by the Inclusive Economy Unit, based in the Office for Civil Society in the Department for Culture, Media and Sport.

Launched in spring 2017, the website contains a wide range of content, including diagnostic tools, blogs, podcasts,

presentation templates and tutorial videos. The online platform is accompanied by offline engagement activities, including events. Good Finance is jointly funded by Access - The Foundation for Social Investment, Big Society Capital and the UK Government, with in-kind support provided by members of the steering group.

Results achieved

From its launch in March 2017 to May 2020, the website registered 150 000 unique users. A user survey performed in 2019 showed positive feedback on the website experience and a significant improvement in self-rating of social investment knowledge before and after visiting the website.

Lessons for other initiatives

Participatory design can help tailor the solution to the needs of social enterprises and charities, as well as their attitudes and experiences of looking for finance. In order to facilitate the user experience of accessing investment, the digital resources should include: well-designed educational content, a searchable directory of partners, case studies, diagnostic tools, board packs/templates and jargon glossary.

To keep content relevant, the platform managers recommend continuously listening to the user voice through stakeholder panels, social media opinion polls, Google Analytics and feedback surveys. Content should be as accessible and inclusive as possible, for instance by making sure that the published case studies are representative in terms of geographical location as well as the demographics of the leadership or the mission of the organisation itself. Collaboration with sector partners and offline connections can further help in making the website engaging and visible.

Source: <https://www.goodfinance.org.uk/>; <https://www.goodfinance.org.uk/latest/post/blog/5-lessons-100k-users>

3. Include financial literacy training as part of financial intermediation

As in traditional financial markets, intermediaries play a pivotal role in connecting the supply and demand sides of the market as well as in developing broader entrepreneurial ecosystems. There is a growing variety of intermediaries that includes accelerators, advisory firms, pooled investment vehicles, stock exchanges and wholesalers, which help broker the relationship between finance providers and social or inclusive entrepreneurs. Another important function is that they provide advice and capacity building to accompany the business creation and growth process and ensure investment-readiness.

Policy makers can do more to ensure that publicly-supported financial intermediaries are providing financial literacy training and support to clients. This includes pre- and post-investment technical assistance to support the capital-raising process and reinforce management skills. The most effective approach for achieving this is to make the public funding partly conditional on including financial literacy training as part of the suite of “soft” supports offered. An example is the Social Finance Academy (Box 5.3) which recently collaborated with the German crowd-funding platform Startnext on an interactive online webinar, to guide social entrepreneurs through the most important questions around financing instruments and options.

Furthermore, policy makers can work with banks and other institutions to ensure that financial literacy materials sufficiently consider the needs of different entrepreneurs, including those with social objectives. Governments could encourage financial

institutions to reflect diversity and inclusion in their information brochures and online training materials. It is also important that they also reflect commercial activities that seek to achieve broader social objectives.

Box 5.3. Social Finance Academy, Germany

Target group:

Social entrepreneurs

Intervention type:

Train the trainer programme

Description:

The Social Finance Academy (SFA) was incubated by Roots of Impact with a clear mission: to empower impact entrepreneurs with the help of practice-driven education to access the financing they need to scale. They received early support from the Swiss Agency for Development and Cooperation, which allowed them to design and deliver financial literacy services for impact enterprises across the globe. The project is implemented in collaboration with iBAN, the Inclusive Business Action Network, a multi-donor initiative led by Germany.

They offer free online content and practice-driven on-site trainings on social finance, investment readiness and impact management. They implement train-the-trainer programs to support accelerators in their own capacity building efforts. They also run an executive education programme for public and philanthropic funders, together with the Center for Sustainable Finance and Private Wealth and Convergence. Under the new Initiative for Blended Finance at the University of Zurich, the programme continues to educate concessional capital providers on how to empower high-impact enterprises through impact investing and blended finance.

Source: <https://social-finance-academy.org/about/>

Results achieved:

The train-the-trainer programmes received consistently positive feedback from organisations like the European Fund for Southeast Europe (EFSE), Nexus for Development, and the Turkish social innovation platform IMECE as well as various Impact Hubs worldwide.

The online course “Access to Impact Investing for Social Enterprises” produced in 2017 is now listed as a recommended resource by Watson Institute in Boulder and by iBAN. The Spanish version is hosted on the learning platform Udemy and has become part of the I3 LATAM acceleration programme for innovative social entrepreneurs in Latin America.

Lessons for other initiatives:

In 2019, SFA has started to position itself as a plug-in offer to existing programmes and communities (as opposed to positioning the SFA as an independent platform). By providing capacity building services to intermediary organisations, specifically on the topic of Investment Readiness and Impact Management, SFA is able to support a wider audience of social entrepreneurs and achieve a higher level of impact through the multiplier effect.

Based on the updated strategy, SFA is now providing train-the-trainer support to intermediary organisations. By leveraging the existing online course resources, the two train-the-trainer programmes on investment readiness and impact management have developed into standard offerings (with both online and blended learning options) and have been attracting interest worldwide.

■ 6 CONCLUSIONS

Access to finance is a significant barrier for inclusive and social entrepreneurship. Entrepreneurs in 'disadvantaged' groups face more and greater barriers to external finance due to several factors, including lower levels of entrepreneurship skills and financial literacy, smaller and poorer quality entrepreneurship networks, and difficulties demonstrating a financial history. Lenders and investors also often struggle with assessing the level of risk of inclusive and social entrepreneurship projects and financial instruments that are not well-suited for inclusive and social entrepreneurship. Consequently, these disadvantaged entrepreneurs can have difficulties getting their businesses off the ground, and are constrained in reaching their growth potential.

Fintech has the potential to improve access to, and increase the supply of, finance for inclusive and social entrepreneurship. As such, fintech can mitigate structural problems in the traditional finance sector, create new approaches to assessing credit worthiness, reduce transaction and operating costs, and directly support inclusion by funding societal and environmental goals. To harness these benefits, policy makers need to ensure that more entrepreneurs from under-represented and disadvantaged population groups and more social entrepreneurs understand and can use these innovations. This can be accomplished through a multi-pronged approach that introduces some of these concepts into existing inclusive and social entrepreneurship training programmes. More advanced training programmes can be offered through partnerships with the private sector using training vouchers, and even more advanced support can be offered through incubator and accelerator programmes that support inclusive and social entrepreneurship. The public sector should not be afraid to look at the many private sector initiatives for inspiration, lessons and partnerships.

However, it will also be important for policy makers to monitor fintech developments to ensure that these innovations do not reinforce financial exclusion. Entrepreneurs from vulnerable groups are less likely to fully understand the risks with fintech solutions and are more likely to be victims of misrepresentation or fraud by those pushing fintech solutions. This means that it is important to stimulate and enable the development of international standards and protection for entrepreneurs. The public sector should also engage directly with the private sector

to understand to which extent algorithms reinforce biases that may harm inclusive and social entrepreneurship, for example through research projects to measure biases in algorithms.

Policy makers also need to consider how fintech solutions can be applied to inclusive and social entrepreneurship programmes. The same fintech technologies that improve efficiency for the private sector, such as AI, machine learning, and data analytics, can also have the potential to improve the efficiency of government agencies and programme managers. Thus, there is also a need to inform and educate government agencies to consider fintech solutions for the implementation of existing start-up financing programmes. The OECD and the EU can play a role in disseminating good practices.

Finally, entrepreneurs from disadvantaged and under-represented groups and social entrepreneurs often have low levels of financial literacy. This can impede the development of their businesses, particularly given rapid innovation in the financial services sector. In general, it will be important to embed financial literacy for entrepreneurship in the education system. In addition, policy therefore needs to offer training courses as well as online, on-demand information products and resources with learning materials and good practice tips for inclusive and social entrepreneurship. An important focus should be on new developments in fintech and the new opportunities they offer. Financial intermediaries can play a strong role in the training, since they have technical expertise and direct contact with entrepreneurs.

Further reading

European Union (2018), FinTech Action Plan, available at: https://ec.europa.eu/info/publications/180308-action-plan-fintech_en.

OECD (2018), G20/OECD INFE Policy Guidance on Digitalisation and Financial Literacy, available at: <http://www.oecd.org/finance/G20-OECD-INFE-Policy-Guidance-Digitalisation-Financial-Literacy-2018.pdf>

OECD/European Union (2019), The Missing Entrepreneurs 2019: Policies for Inclusive Entrepreneurship, OECD Publishing, Paris, <https://doi.org/10.1787/3ed84801-en>.

■ REFERENCES

- Adebaki, B. (2018), *Blockchain's Battle with Financial Inclusion — Part 1*, <https://medium.com/blockchain-at-berkeley/blockchains-battle-with-financial-inclusion-part-1-b938232059fd>.
- ADIE (2019), *Seniors over 45, a generation that has not said its last word*.
- Ahlers, G. et al. (2015), "Signaling in Equity Crowdfunding", *Entrepreneurship Theory and Practice*, Vol. 39/4, pp. 955-980.
- Ahmed, U. et al. (2015), "Filling the Gap: How Technology Enables Access to Finance for Small- and Medium-Sized Enterprises", *Innovations: Technology, Governance, Globalization*, Vol. 10/3-4, pp. 35-48.
- Atkinson, A. and F. Messy (2012), "Measuring Financial Literacy: Results of the OECD / International Network on Financial Education (INFE) Pilot Study", *OECD Working Papers on Finance, Insurance and Private Pensions*, No. 15, OECD Publishing, Paris, <https://dx.doi.org/10.1787/5k9csfs90fr4-en>.
- Bassi, A. and A. Fabbri (2019), *Crowdfunding: Threat or opportunity for social economy? Third sector organisations and social enterprises facing the challenge of ICT funding strategies*, <https://emes.net/content/uploads/ESCP-7EMES-03-Bassi-Fabbri.pdf> (accessed on 14 May 2020).
- Bates, T., W. Bradford and R. Seamans (2018), "Minority entrepreneurship in twenty-first century America", *Small Business Economics*, Vol. 50/3, pp. 415-427.
- Belleflamme, P., T. Lambert and A. Schwienbacher (2013), "Individual crowdfunding practices", *Venture Capital*, Vol. 15/4, pp. 313-333.
- Betts, A., N. Omata and L. Bloom (2017), "Thrive or Survive? Explaining Variation in Economic Outcomes for Refugees", *Journal on Migration and Human Security*, Vol. 5/4, pp. 716-743.
- Bosma, N. et al. (2016), *Global entrepreneurship monitor 2015 to 2016: Special topic report on social entrepreneurship*, Global Entrepreneurship Research Association, <http://www.gemconsortium.org>.
- Bruton, G. et al. (2015), "New financial alternatives in seeding entrepreneurship: Microfinance, crowdfunding, and peer-to-peer innovations", *Entrepreneurship Theory and Practice*, Vol. 39/1, pp. 9-26.
- Bugg-Levine, A., B. Kogut and N. Kulatilaka (2012), "A New Approach to Funding Social Enterprises", *Harvard Business Review*, Vol. 90/1-2, pp. 118-123.
- Business Development Bank of Canada (2017), *Financial literacy among Canadian entrepreneurs and business owners*, Joint project: BDC Research and Market Intelligence, and the Telfer School of Business at the University of Ottawa, https://www.bdc.ca/en/documents/analysis_research/financial-literacy-among-canadian-entrepreneurs-business-owners.pdf.
- Calic, G. and E. Mosakowski (2016), "Kicking off social entrepreneurship: How a sustainability orientation influences crowdfunding success?", *Journal of Management Studies*, Vol. 53/5, pp. 738-767.
- CASES (2020), "A realidade estatística das Cooperativas de Solidariedade Social em Portugal", <https://www.cases.pt/wp-content/uploads/2020/05/Relat%C3%B3rio-CASES-Cooperativas-Solidariedade-Social.pdf> (accessed on 5 June 2020).
- CCAF (2020), *The Global Alternative Finance Market Benchmarking Report*, Cambridge Centre for Alternative Finance, Cambridge, <https://www.jbs.cam.ac.uk/faculty-research/centres/alternative-finance/publications/the-global-alternative-finance-market-benchmarking-report/>.
- Cho, Y. and M. Honorati (2014), "Entrepreneurship programs in developing countries: A meta regression analysis", *Labour Economics*, Vol. 28/C, pp. 110-130.
- Cosh, A., D. Cumming and A. Hughes (2009), "Outside entrepreneurial capital", *The Economic Journal*, Vol. 119/540, pp. 1494-1533, <https://doi.org/10.1111/j.1468-0297.2009.02270.x>.
- Cumurovic, A. and W. Hyll (2019), "Financial Literacy and Self-Employment", *The Journal of Consumer Affairs*, Vol. 53/2, pp. 455-487, <http://dx.doi.org/10.1111/joca.12198>.
- Daniels, C., M. Herrington and P. Kew (2016), *Global Entrepreneurship Monitor 2015/2016: Special Report on Entrepreneurial Finance*, Global Entrepreneurship Research Association, <http://www.gemconsortium.org>.
- DCMS (2017), *Social Enterprise: Market Trends 2017*, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/644266/MarketTrends2017report_final_sept2017.pdf (accessed on 5 June 2020).

- Deloitte (2019), *Do sustainable banks outperform? Driving value creation through ESG practices Report background*, <https://www2.deloitte.com/content/dam/Deloitte/lu/Documents/financial-services/Banking/lu-do-sustainable-banks-outperform-driving-value-creation-through-ESG-practices-report-digital.pdf> (accessed on 3 August 2020).
- DiCaprio, A., Y. Yao and R. Simms (2017), *Women and Trade: Gender's Impact on Trade Finance and Fintech*, Asian Development Bank Institute, Tokyo, <https://www.adb.org/sites/default/files/publication/389186/adb-wp797.pdf>.
- Drexler, A., G. Fischer and A. Schoar (2014), "Keeping It Simple: Financial Literacy and Rules of Thumb", *American Economic Journal: Applied Economics*, Vol. 6/2, pp. 1-31.
- Economist Intelligence Unit (2019), *Global Microscope 2019: The enabling environment for financial inclusion*, https://www.eiu.com/public/topical_report.aspx?campaignid=microscope2019.
- Ellman, M. and S. Hurkens (2019), "Optimal crowdfunding design", *Journal of Economic Theory*, Vol. 184/C, <http://dx.doi.org/10.1016/j.jet.2019.104939>.
- Eurofound (2016), *Start-up support for young people in the EU: From implementation to evaluation*, <https://www.eurofound.europa.eu/publications/report/2016/labour-market-business/start-up-support-for-young-people-in-the-eu-from-implementation-to-evaluation>.
- Eurofound (2015), *Youth Entrepreneurship in Europe: Values, attitudes, policies*, <https://www.eurofound.europa.eu/publications/report/2015/labour-market/youth-entrepreneurship-in-europe-values-attitudes-policies>.
- European Commission (2020), *Social enterprises and their ecosystems in Europe – Comparative synthesis report*, <https://ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=8274> (accessed on 3 August 2020).
- European Commission (2011), *Social Business Initiative Creating a Favourable Climate for Social Enterprises, Key Stakeholders in Social Economy and Innovation*, Publications Office of the European Union, Luxembourg, <https://www.fi-compass.eu/publication/other-resources/social-business-initiative-creating-favourable-climate-social>.
- European Institute of Innovation & Technology (2020), *Women Entrepreneurship and Leadership*, <https://eit.europa.eu/our-activities/entrepreneurship/women-entrepreneurship-and-leadership>.
- European Parliament (2019), "EU rules to boost European crowdfunding platforms agreed", <https://www.europarl.europa.eu/news/en/press-room/20191218IPR69306/eu-rules-to-boost-european-crowdfunding-platforms-agreed>.
- European Union (2019), *SME access to finance in the EU countries 2019*, EU Publishing, Luxembourg, <https://ec.europa.eu/docsroom/documents/38442>.
- FASE (2018), "Facilitating Hybrid Finance for Social Enterprise", https://fa-se.de/static/fa_se_de/uploads/2018/07/Final-Project-Report-VS-2016-0353.pdf (accessed on 14 May 2020).
- Fernandes, D., J. Lynch and R. Netemeyer (2014), "Financial Literacy, Financial Education and Downstream Financial Behaviors", *Management Science*, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2333898.
- Figueiredo, E. and T. Paiva (2019), "Senior entrepreneurship and qualified senior unemployment: The case of the Portuguese Northern region", *Journal of Small Business and Enterprise Development*, Vol. 26/3, pp. 342-362, <http://dx.doi.org/10.1108/JSBED-01-2018-0006>.
- Finovate (2020), *Women in Fintech*, <https://finovate.com/category/women-in-fintech/>.
- FSB (2017), *Financial Stability Implications from FinTech: Supervisory and Regulatory Issues that Merit Authorities' Attention*, Financial Stability Board, <https://www.fsb.org/wp-content/uploads/R270617.pdf>.
- GECES (2016), *Social enterprises and the social economy, going forward. A call for action from the Commission Expert Group on Social Entrepreneurship (GECES)*.
- George, G. et al. (2016), "Big Data and Data Science Methods for Management Research", *Academy of Management Journal*, Vol. 59/5, pp. 1493-1507, <http://doi.org/10.5465/amj.2016.4005>.
- GIIN (2019), *Annual Impact Investor Survey*, <https://thegiin.org/research/publication/impinv-survey-2019> (accessed on 29 May 2020).
- Global Entrepreneurship Monitor (2019), *Special tabulations of the GEM survey 2014-18*.
- Gornall, W. and I. Strebulaev (2020), *Gender, Race, and Entrepreneurship: A Randomized Field Experiment on Venture Capitalists and Angels*, SSRN, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3301982.
- Halabisky, D. (2014), "Entrepreneurial Activities in Europe - Entrepreneurship for People with Disabilities", *OECD Employment Policy Papers*, No. 6, OECD Publishing, Paris, <https://dx.doi.org/10.1787/5jxrcmkcxjq4-en>.

- Halabisky, D. (2012), "Entrepreneurial Activities in Europe – Youth Entrepreneurship", *OECD Employment Policy Papers*, No. 1, OECD Publishing, Paris, <https://dx.doi.org/10.1787/5jxrcmlf2f27-en>.
- Hussain, J., S. Salia and A. Karim (2018), "Is knowledge that powerful? Financial literacy and access to finance: An analysis of enterprises in the UK", *Journal of Small Business and Enterprise Development*, Vol. 25/6, pp. 985-1003.
- Innovate/Finance (2019), *Female founders make up just 17% of Fintech companies and Women receive only three percent of VC FinTech funding*, <https://www.innovatefinance.com/if-news/female-founders-make-up-just-17-of-fintech-companies-and-women-receive-only-three-percent-of-vc-fintech-funding/>.
- Johnson, M., R. Stevenson and C. Letwin (2018), "A Woman's Place Is in the... Startup! Crowdfunder Judgments, Implicit Bias, and the Stereotype Content Model", *Journal of Business Venturing*, Vol. 33/6, pp. 813-831.
- Junior Achievement Europe (2016), *Sharpening Financial Education: How the right partnerships can hone the skills of tomorrow's entrepreneurs and employees*.
- Kaiser, T. and L. Menkhoff (2018), "Financial Education in Schools: A Meta-Analysis of Experimental Studies", *CESifo Working Paper*, No. 7395, Kaiser, Tim and Menkhoff, Lukas, Financial Education in Schools: A Meta-Analysis of Experimental Studies (2018). CESifo Working Paper No. 7395. Available at SSRN: <https://ssrn.com/abstract=3338749>.
- Keizer, A. et al. (2016), "Scaling the impact of the social enterprise sector".
- Kibler, E. et al. (2012), "(Work)life after work?: Older entrepreneurship in London – motivations", Kingston University, Small Business Research, http://www.academia.edu/714990/Work_Life_after_work_understanding_barriers_to_older_entrepreneurship_in_London.
- Klapper, L. and A. Lusardi (2020), "Financial literacy and financial resilience: Evidence from around the world", *Financial Management*, Vol. 49/3, <http://dx.doi.org/10.1111/fima.12283>.
- Korean Ministry of SMEs and Startups (2019), *Social Venture Survey*, <http://portal.kocca.kr/portal/bbs/view/B0000204/1940955.do;KCESSIONID=b2mLp2sLCy2mvVcC7D7p2mzdclDjtTdN9zwwgQvp7RJVwYGMxvV1838364227!1456667621?menuNo=200247&categorys=4&subcate=58&cateCode=0> (accessed on 15 May 2020).
- Koreen, M. and N. Nemoto (2019), "Digital Innovation Can Improve Financial Access for SMEs", *G20 Insights*, https://www.g20-insights.org/policy_briefs/digital-innovation-can-improve-financial-access-for-smes/.
- Lassébie, J. et al. (2019), "Levelling the playing field : Dissecting the gender gap in the funding of start-ups", *OECD Science Technology and Industry Policy Paper*, No. 73, OECD Publishing, Paris, <https://doi.org/10.1787/23074957>.
- Lusardi, A. (2019), "Financial literacy and the need for financial education: evidence and implications", *Swiss Journal of Economics and Statistics*, Vol. 155/1, <http://dx.doi.org/10.1186/s41937-019-0027-5>.
- Lyon, F., L. Sepulveda and S. Syrett (2007), "Enterprising refugees: contributions and challenges in deprived urban areas", *Local Economy*, Vol. 22/4, pp. 362-375.
- Malmström, M. et al. (2020), "How Universal is the Relationship between Entrepreneurs' Gender and Access to Finance? A Meta-Analysis and Extension to Understand the Moderating Role of Occupational Power Distribution", *Entrepreneurship Theory and Practice*.
- Malmström, M., J. Johansson and J. Wincent (2017), "Gender Stereotypes and Venture Support Decisions: How Governmental Venture Capitalists Socially Construct Entrepreneurs' Potential", *Entrepreneurship Theory and Practice*, Vol. 41/5, pp. 833-860.
- Malmström, M. and J. Wincent (2018), "The Digitization of Banks Disproportionately Hurts Women Entrepreneurs", *Harvard Business Review*.
- Mansfield, C. and D. Gregory (2019), "Capitalism in crisis?", <https://www.socialenterprise.org.uk/wp-content/uploads/2019/11/Capitalism-in-Crisis.pdf> (accessed on 13 May 2020).
- Marchese, M. (2014), "Entrepreneurial Activities in Europe – Finance for Inclusive Entrepreneurship", *OECD Employment Policy Papers*, No. 5, OECD Publishing, Paris, <https://dx.doi.org/10.1787/5jxrcmkqkzss-en>.
- Matos, C., M. Amaral and R. Baptista (2018), "Senior Entrepreneurship: A Selective Review and a Research Agenda", *Foundations and Trends in Entrepreneurship*, Vol. 14/5, pp. 427-554.
- Moghaddam, K. et al. (2017), "High-Growth Entrepreneurial Firm Funding: A Qualitative Study of Native-Born and Immigrant Entrepreneurs", *Venture Capital*, Vol. 19/1-2, pp. 75-94.
- Neville, F. et al. (2018), "Why Even Bother Trying? Examining Discouragement among Racial-Minority Entrepreneurs", *Journal of Management Studies*, Vol. 55/3, pp. 424-456.

OECD (2020a), *Financing SMEs and Entrepreneurs 2020: An OECD Scoreboard*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/061fe03d-en>.

OECD (2020b), *PISA 2018 Results (Volume VI): Are Students Ready to Thrive in an Interconnected World?*, PISA, OECD Publishing, Paris, <https://dx.doi.org/10.1787/d5f68679-en>.

OECD (2019a), *OECD SME and Entrepreneurship Outlook 2019*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/34907e9c-en>.

OECD (2019b), *Social Impact Investment 2019: The Impact Imperative for Sustainable Development*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/9789264311299-en>.

OECD (2018), *Blockchain Primer*, OECD, Paris, <https://www.oecd.org/finance/OECD-Blockchain-Primer.pdf>.

OECD (2016), *Big Data: Bringing Competition Policy to the Digital Era*, OECD, Paris, [https://one.oecd.org/document/DAF/COMP\(2016\)14/en/pdf](https://one.oecd.org/document/DAF/COMP(2016)14/en/pdf).

OECD (2015), *Data-Driven Innovation: Big Data for Growth and Well-Being*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/9789264229358-en>.

OECD (2013), *Evaluating Financial Education Programmes: Survey, evidence, policy instruments and guidance*, OECD, Paris, https://www.oecd.org/daf/fin/financial-education/G20-Evaluating_Fin_Ed_Programmes_2013.pdf.

OECD (2012), *Closing the Gender Gap: Act Now*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/9789264179370-en>.

OECD (1999), *Social Enterprises*, <https://www.oecd.org/cfe/leed/socialenterprises.htm> (accessed on 3 August 2020).

OECD/EC (2012), "Entrepreneurial Activities in Europe – Senior Entrepreneurship", *OECD Employment Policy Papers*, No. 2, OECD, <http://dx.doi.org/10.1787/5jxrcl7lhxq-en>.

OECD/EU (2017), *Boosting Social Enterprise Development: Good Practice Compendium*, OECD Publishing, Paris.

OECD/EU (2016), *Policy Brief on Women's Entrepreneurship*, <https://www.oecd.org/cfe/smes/Policy-Brief-on-Women-s-Entrepreneurship.pdf>.

OECD/EU (2015), *Policy Brief on Expanding Networks for Inclusive Entrepreneurship*, OECD, Paris, <https://doi.org/10.1787/23114886>.

OECD/EU (forthcoming) (n.d.), *Policy brief on recent developments in youth entrepreneurship policy*, OECD Publishing, Paris.

OECD/European Commission (2020), "Policy brief on recent developments in youth entrepreneurship", *OECD SME and Entrepreneurship Papers*, No. 19, OECD Publishing, Paris, <https://dx.doi.org/10.1787/5f5c9b4e-en>.

OECD/European Union (2019), *The Missing Entrepreneurs 2019: Policies for Inclusive Entrepreneurship*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/3ed84801-en>.

OECD/European Union (2014), *The Missing Entrepreneurs 2014: Policies for Inclusive Entrepreneurship in Europe*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/9789264213593-en>.

OECD-INFE (2011), *Measuring Financial Literacy: Questionnaire and Guidance Notes for Conducting an Internationally Comparable Survey of Financial Literacy*, <https://www.oecd.org/finance/financial-education/49319977.pdf>.

Oggero, N., M. Rossi and E. Ughetto (2019), "Entrepreneurial spirits in women and men. The role of financial literacy and digital skills", *Small Business Economics*, <https://doi.org/10.1007/s11187-019-00299-7>.

Oreland, C. (2016), *Företagande bland unga och betydelsen av egen förmögenhet*, Svenskt Näringsliv.

Palmié, M. et al. (2019), "The evolution of the financial technology ecosystem: an introduction and agenda for future research on disruptive innovations in ecosystems", *Technological Forecasting and Social Change* 151, <http://dx.doi.org/10.1016/j.techfore.2019.119779>.

Parhankangas, A. and M. Renko (2017), "Linguistic style and crowdfunding success among social and commercial entrepreneurs", *Journal of Business Venturing*, Vol. 32/2, pp. 215-236, <https://doi.org/10.1016/j.jbusvent.2016.11.001>.

Passeri, F. (2019), *A guide to crowdfunding for local authorities*, URBACT, <https://www.blog.urbact.eu/2019/09/guide-crowdfunding-local-authorities/>.

Pilková, A., Z. Jancovicová and Z. Kovacicová (2016), "Inclusive entrepreneurship in Visegrad4 countries", *Procedia – Social and Behavioral Sciences* 220, pp. 312-320.

- RSK (2020), *5 Reasons to Understand Why Blockchain Technology Can Promote Financial Inclusion*, <https://blog.rsk.co/noticia/5-reasons-to-understand-why-blockchain-technology-can-promote-financial-inclusion/>.
- Scharpe, K. and M. Wunsch (2019), "Deutscher Social Entrepreneurship Monitor", <https://www.send-ev.de/uploads/DSEM2019.pdf> (accessed on 13 May 2020).
- Schöndienst, V., F. Kulzer and O. Günther (2012), *Like Versus Dislike: How Facebook's Like-Button Influences People's Perception of Product and Service Quality*, https://www.researchgate.net/publication/281805090_Like_versus_dislike_How_Facebook's_like-button_influences_people's_perception_of_product_and_service_quality.
- Schøtt, T., P. Kew and M. Cheraghi (2015), *Future Potential: A GEM perspective on youth entrepreneurship 2015*, <http://www.innovacion.cl/wp-content/uploads/2015/08/gem-2015-youth-report-1436523546.pdf>.
- SEND (2019), *Statement zur Antwort der Bundesregierung auf die Kleine Anfrage „Social Entrepreneurship“ von der Bundestagsfraktion Bündnis 90/Die Grünen | SEND*, https://www.send-ev.de/2019-02-11_statement-zur-antwort-der-bundesregierung-auf-die-kleine-anfrage-%E2%80%99social-entrepreneurship%E2%80%9C-von-der-bundestagsfraktion-b%C3%BCndnis-90-die-gr%C3%BCnen/ (accessed on 22 April 2020).
- Shepherd, D. et al. (2020), "Rallying the Troops and Defending against Sanctions: A Government Body Breaking Decision-Making Rules to Fund Entrepreneurial Ventures", *Journal of Management Studies*, <https://doi.org/10.1111/joms.12562>.
- Skonieczna, A. and L. Castellano (2019), "Gender Smart Financing Investing In & With Women: Opportunities for Europe", *European Economy Discussion Papers*, No. 129, European Commission, Luxembourg.
- Slade, H. (2013), "Why Is It So Hard For Female Entrepreneurs To Get VC Funding? Could Crowdfunding Be The Answer?", *Forbes Magazine*.
- Social Enterprise NL (2019), *De Social Enterprise Monitor 2019*, https://www.social-enterprise.nl/application/files/8615/7165/8222/362_Publicatie_SE_monitor2019_web.pdf (accessed on 3 August 2020).
- Social Enterprise NL (2018), *THE SOCIAL ENTERPRISE MONITOR 2018*, https://www.archief.social-enterprise.nl/files/2415/3994/7219/256_Publicatie_SE_monitor2018_EN_spreads.pdf (accessed on 3 August 2020).
- Starte dein Projekt (2020), *Crowdfunding mit „StarteDeinProjekt“*, <https://secure.startedeinprojekt.at/>.
- The State of European Tech (2018), *We've Got a Problem*, The State of European Tech Report 2018, <https://2018.stateofeuropeantech.com/chapter/diversity-inclusion/article/weve-got-problem/>.
- Thébaud, S. and A. Sharkey (2016), "Unequal Hard Times: The Influence of the Great Recession on Gender Bias in Entrepreneurial Financing", *Sociological Science*, Vol. 3.
- UBI Banca (2019), *Indagine sui fabbisogni finanziari Cooperazione e impresa sociale*, https://mk0wwwaicconitmk98w.kinstacdn.com/wp-content/uploads/2019/07/Osservatorio-UBI-Banca-VIII-ed_Executive-Summary.pdf (accessed on 14 May 2020).
- UK Cabinet Office (2016), "Designing Social Investment", <https://www.goodfinance.org.uk/sites/default/files/post/pdf/Designing%20Social%20Investment%20-%20Good%20Finance%20User%20Research.pdf> (accessed on 29 May 2020).
- Vanacker, T. and S. Manigart (2010), "Pecking Order and Debt Capacity Considerations for High-Growth Companies Seeking Financing", *Small Business Economics*, Vol. 35/1, pp. 53-69.
- Wilkinson, C. et al. (2014), *A Map of Social Enterprises and their Eco-Systems in Europe*, European Commission. A Report Submitted by ICF Consulting Services.
- Wise, S. (2013), "The Impact of Financial Literacy on New Venture Survival", *International Journal of Business and Management*, Vol. 8/23, pp. 30-39, <http://dx.doi.org/10.5539/ijbm.v8n23p30>.
- Wood Brooks, A. et al. (2014), "Investors prefer entrepreneurial ventures pitched by attractive men", *Proceedings of the National Academy of Sciences of the United States of America*, Vol. 111/12, pp. 4427-4431, <https://doi.org/10.1073/pnas.1321202111>.
- Zandonai, F. (2018), *L'IMPRESA SOCIALE CHE CAMBIA INDAGINE SULLA COMMUNITY IRIS NETWORK*, <http://workshop.irisnetwork.it/wp-content/uploads/2018/10/indagine-community-iris-network.pdf> (accessed on 14 May 2020).
- Zheng, Z. et al. (2018), "Blockchain Challenges and Opportunities: A Survey", *International Journal of Web and Grid Services*, Vol. 14/4, pp. 352-375.

Ziegler, T. et al. (2018), *Expanding horizons: The 3rd European alternative finance industry report*, Cambridge Centre for Alternative Finance, https://www.researchgate.net/publication/323001310_Expanding_Horizons_The_3rd_European_Alternative_Finance_Industry_Report.

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This policy brief on access to finance for inclusive and social entrepreneurship was produced by the OECD and the European Commission. It presents evidence on the access to finance challenges faced by entrepreneurs from under-represented and disadvantaged groups and social entrepreneurs, and discusses how public policy could harness the potential of fintech to address these challenges. This covers crowdfunding, blockchain and the application of big data to finance for inclusive and social entrepreneurship. The policy brief also discusses the growing need for governments to strengthen financial literacy among the target groups of inclusive and social entrepreneurship policy, including with respect to fintech. Different policy approaches are discussed, including embedding financial literacy training in financial intermediation.

Policy briefs are short reports designed for policy makers and practitioners, which are part of a series of documents produced by the OECD and the European Commission on inclusive and social entrepreneurship. The series includes policy briefs on a range of topics including for example youth entrepreneurship, women's entrepreneurship, social economy and its contribution to the circular economy, and social impact measurement for social enterprises, as well as the 'The Missing Entrepreneurs' publication series, good practice compendium books on inclusive and social entrepreneurship, country-specific reports and in depth policy reviews on social entrepreneurship. These publications can be accessed at: <https://www.oecd.org/cfe/smes/inclusive-entrepreneurship/> and <https://www.oecd.org/cfe/leed/social-economy/>.

